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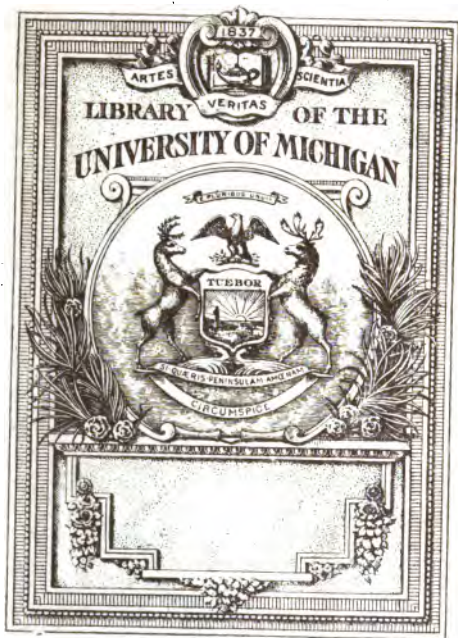
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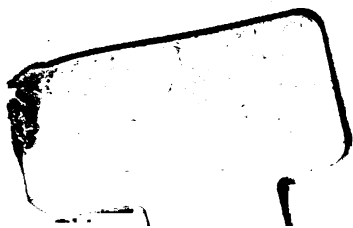
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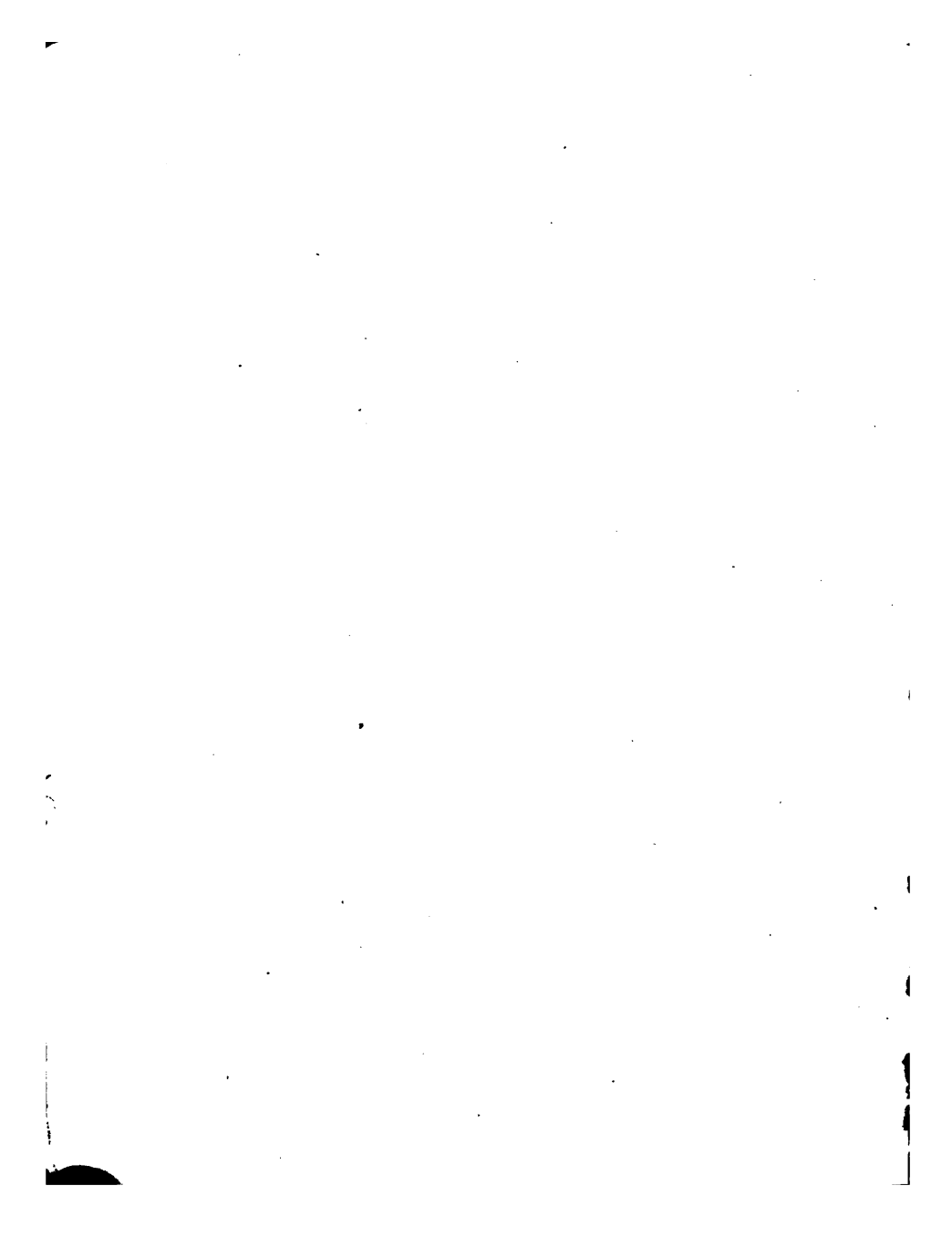
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**How to
Analyze Industrial
Securities**



How to Analyze Industrial Securities



By **CLINTON COLLVER**
Staff Expert, **Moody's Investors Service**

FIRST EDITION

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PREFACE

A large number of the biggest industrial corporations have long published complete information. Yet no book has been published up to now on methods of industrial analysis, although the course of investment and speculation has turned largely into industrial channels and the United States has become the greatest industrial nation.

This book has been planned to treat industrials as John Moody's "How to Analyze Railroad Reports" does the steam transportation lines.

The writer has come into personal contact with a large number of individuals who have been most unfortunate in their industrial "investments." This book has been written to point out the dangers. It is for those who have taken care of the pennies, but who have found the dollars under constant siege by deceptive "opportunities."

Taking the positive angle, this book is particularly intended to be helpful in pointing the way to profitable investment and speculation. Analysis is always profitable because so many people will never avail themselves of it, because so many are perfectly willing to work years to accumulate funds which they take minutes to place. So in times good or bad the markets are full of anomalies, securities which are selling entirely out of line with the general run.

If all investors and speculators based their commitments upon cool analysis, the security markets would be

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dull localities. However, human nature does not change. In the days of John Law's Mississippi Bubble and in the present day boom, exactly the same tendencies have prevailed. Cupidity still holds sway, but creates opportunities easily available to those who will determine their purchases and sales upon analysis instead of unsupported hopes.

The only publication found dealing with the subject of this little volume was a pamphlet of the stock exchange firm of Eastman, Dillion & Company. Acknowledgment is gladly made for help received at the University of Wisconsin and the New York University, especially to Dr. A. M. Sakolski, sometime lecturer at the New York University.

Effort has been made to bring out methods of analysis by the use of concrete illustrations, mostly taken from well known corporations, rather than by theoretical dissertation. Suggestions and criticisms in regard to this book will be promptly acknowledged and sincerely appreciated.

CLINTON COLLVER.

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INTRODUCTION

I

Preliminary Statement

IN order to analyze securities of any kind it is essential that complete and frequent reports of earnings and reliable figures as to financial condition be available. Without light we are in the dark and darkness in the financial world is the moral breach of trust of the use of "inside information" possessed by the few—and the hopeless gambling of uninformed outsiders.

It is true that some industrial corporations do not report their earnings or their true financial affairs with the promptness and fidelity to truth which characterizes such companies as the Pennsylvania Railroad. Yet there are railroads whose statements have been found in gross error, and a Pennsylvania among the industrials exists.

Investment is the placement of funds for safety of principal and surety of interest return; speculation is defined as the intelligent attempt to discount the future; gambling as the staking of money on blind chance. It is therefore clear that investment and speculation are not possible unless full and frequent reports of earnings and reliable statements of financial condition are given. If certain industrial corporation directors have not yet discovered that the dishonor of breach of trust is outgrown, the public can assist in the awakening and incidentally preserve its hard-earned dollars by directing its attention

to companies issuing more reliable and more frequent information and which are managed for the benefit of the stockholders as a whole.

A new doctrine, a new standard of publicity and conscientious responsibility has arrived and with it a more friendly attitude of the public mind toward industrial corporations. The increased demands for publicity on the part of stockholders, more nearly approaching the close responsibility demanded by English stockholders, the demands of Government officials for more uniform reports and the well-defined increase in moral responsibility of directors of industrial corporations results in information admitting intelligent analysis of industrial corporation securities.

Also, through the years have come the results of experience—of good and bad experience; better methods in promotion and capitalization. Mistakes and weaknesses of the older corporations have been either largely outgrown or pruned in drastic reorganization. Latter day reorganizations, forced by weak methods or gross errors in management, have been accomplished to meet the conditions of poor times, so that the approach of prosperity brings almost certain and large profits. In the light of innumerable previous reorganizations errors and weaknesses have been eliminated which in former years would have existed even after reorganization.

It has been said that a brick could not be thrown away in the Carnegie Steel Company's plants without its principal owner being forthwith apprised of the fact through its accounting department. Mr. Carnegie was

one of the first business men in control of large industry to realize the importance of properly kept books of account and to use them in formulating plans of action.

To the advance in accounting work a generous part of the advance in corporation management must be credited. Officials now know facts that their predecessors blindly guessed at; they have day by day related facts, figures and graphs essential to the conduct of modern business that managers of only yesterday knew nothing about. Accurate knowledge of costs of production is only one of the results of modern accounting methods that were not available when large industrial enterprise originated.

Managers generally now take a long range view of corporation finance. Strength of treasury, upkeep of property, improvements of methods and expansion of activities and of markets appear more important than exhibitions of inflated income accounts and balance sheets, brightly colored in order to declare unearned dividends and thereby to cultivate artificially the growth of security prices.

More intelligent and advanced methods in competition prevail at the present time than formerly. Instead of relentless competition, usually destructive to all concerned, a spirit of helpful co-operation now generally exists among industrial enterprises of any size. In the suits of the Government against the United States Steel Corporation and the International Harvester Company no competitor could be found who was not their friend.

Associations of active competitors have eliminated innumerable trade abuses and testify to the new doctrine

that in the unlimited trade possibilities of the world the prosperity of one depends upon the prosperity of all. In the Railway Business Association, for example, are over four thousand firms and corporations manufacturing railway supplies and equipment. The Wool Association, only recently organized, ties together great and small factors in the wool trade. Almost immediately upon its birth the association eradicated flagrant trade practices which had persisted for generations. It is not surprising that there is less opposition to big business to-day than at any time since the possible evils of trust operation were first recognized.

II

Policy of Publicity

THE contention against publicity most frequently offered by corporations is that it would injure them to publish reports which would inform their competitors of the progress of their business and profits. But if all corporations should agree to issue such reports any drawback from this source would cease. The advantage to be gained from the knowledge would be general. At its best, this policy of concealment is a narrow one, abandoned by progressive corporations in every line, and it is doubtful if many of those who put the argument forward believe in it.

That policies of publicity adopted by various large corporations are varied is not surprising, since any policy of adequate publicity is not yet universal; the old and obsolescent "information for insiders only" still prevails in certain corporations. However, many important corporations make sincere attempts at publicity. Representative examples are as follows:

Sears, Roebuck & Company and the F. W. Woolworth Company give their total monthly sales each month. This is good, as far as the information goes; it leaves much to be imagined as to net profits.

The American Hide & Leather Company gives net

earnings each quarter in cumulative form, *i. e.*, three, six, nine, twelve months.

The American Steel Foundry Company gives quarterly reports.

The Hercules Powder Company gives quarterly gross, net earnings, surplus cumulatively, *i. e.*, three, six, nine, twelve months.

The Lackawanna Steel Company gives quarterly income each quarter in cumulative form and record of unfilled tonnage orders.

The Vulcan Detinning Company gives quarterly sales, quarterly net profits in cumulative form.

The General Chemical Company gives quarterly reports.

The J. I. Case Threshing Machine Company gives quarterly reports.

The Central Leather Company gives quarterly reports.

The United States Steel Corporation's quarterly reports show earnings by months. Since 1911 the gross sales to customers have been separated from sales between subsidiary companies. On the tenth of each month a report of unfilled orders on hand is issued, which, taken in connection with the activity of plants and the prices of steel and iron, give a reasonable line on current earnings monthly.

The United States Rubber Company gives semi-annual reports of earnings. Quarterly reports were given out at one time but were abandoned, the company asserting that rubber earnings were so variable because of seasonal influences that quarterly reports were misleading.

The 1916 annual meeting of the American Brake Shoe and Foundry Company provided an interesting development. A stockholder moved that quarterly reports of the company's business be made public, but this was voted down. The chairman said that such reports were now compiled for the perusal of the directors and that they were open to the inspection of stockholders if the latter so desired.

The Corn Products Refining Company gives quarterly reports.

All companies whose stocks are now listed on the New York Stock Exchange must publish at least once a year and submit to stockholders at least fifteen days in advance of the annual meeting a statement of their physical and financial condition, consisting of a consolidated income account concerning the previous fiscal year and a consolidated balance sheet showing assets and liabilities at the end of the year. The exchange authorities are making efforts to insure publication of these reports inside of the fifteen days' limit, also to secure the voluntary publication of quarterly or semi-annual reports in addition to the compulsory annual reports. It is now widely recognized that quarterly if not monthly reports are possible and necessary for the protection of the public.



III

Industrials Compared With Railroads

METHODS of analysis of railway securities have been well publicized. In the search for methods of analyzing and judging industrial securities the essential differences between railroad and industrial securities are worth considering.

1. As to stability of earnings: The advantage is surely on the side of the railroads, although certain chain store corporations and packing companies exhibit earnings of a consistency to make the best railroad organization envious.

The margin of earnings over interest charges is usually much smaller, especially in times of prosperity, for the railroads which cannot raise rates as the demand for their service increases. Industrials not only enjoy better business in prosperity but greater business at greater margins of profit. In depression, railroads cannot store their service as can industrials their products, nor can they dump their service abroad as can the industrials their output. In prosperous times railroads have to spend more for materials, wages, etc., and net earnings may actually decrease as business becomes too great to handle with economy. In times of depression, materials and wages are lower in cost. In but few railroad systems can such expenditures be cut to offset the decrease in traffic. Yet

depression in rail earnings does not as a rule compare in depth with the depression experienced in specific industrial corporations.

2. Elasticity. Industrial corporations can more easily increase the capacity of their plants or buy other plants to supplement their output. The railroad is fixed. Increase in capacity beyond the normal is most difficult.

3. Possible failure in demand for products of industrial corporations. The services of railroads are always necessary. A bankrupt railroad is almost never torn up. It is reorganized and operation does not cease. The country is dotted with empty industrial plants whose products are no longer marketable.

4. Lack of standardization of activities and methods. Railroad operation is a science. Methods are practically identical from one end of the country to the other, so that employes and officials are almost interchangeable. Industrial operations are as many as the variations of all industry—variations almost infinite in number, from building of battleships to producing a moving picture film. Even so, the advantage of accounting and cost keeping, methods of sales and of advertising generally, are bringing the principles of operation of the various classes of industrial corporations into closer relationship.

5. Large possibility of expansion of industrial earnings through diversification of products and expansion of markets. Railroad business is more limited to the shipments of agricultural products or industries in the territory adjacent to it. New and profitable traffic arrangements can be made, but usually the field for such action is lim-

ited. The possibilities of expansion of industrial organization are almost without limit.

6. Difference in business and financial structure and financial method. Fixed property such as rail and right of way, equipment, stations, etc., usually form from 95 per cent. up of railroad assets. Business being more stable and dependable, railroads finance themselves more generally with borrowed funds and, since their business is practically on a cash basis, need little actual bank balance. From 50 per cent. upward of the property of industrial corporations is, or should be, in trading and current assets as a rule. Industrials usually have the more simple corporate organization. Many railroads control subsidiaries through lease or guarantees, conditions not usual among industrials. Securities of railroads are issued in divers forms from debentures to terminal mortgages. Industrial capitalization is usually very simple.



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IV

Magnitude and Varieties of Industrials

CENSUS figures show an increase in the value of manufactured products from \$5,369,579,000 in 1879 to \$24,246,323,000 for 1914, with an advance in capital invested from \$2,790,273,000 to \$22,790,880,000. This growth naturally reflects in increased interest in industrial securities. The amount of business done by the largest industrials compares favorably with the receipts of the greatest railroad systems.

The preliminary statement of the census released in August, 1916, shows statistics for manufacturing, excluding building trades and hand trades, as compared with figures for 1909.

	1914	1909	% In-crease
Number Establishments.	275,793	268,491	2.7
Number Persons Engaged, Average During Year	7,036,337	7,678,578	7.6
Primary Horsep'r Used	22,537,129	18,675,376	20.7
Capital Owned and Borrowed	\$22,790,880,000	\$18,428,270,000	23.7
Salaries	\$1,287,917,000	\$938,575,000	37.2
Wages	\$4,079,332,000	\$3,427,038,000	19.0
Services (total)	\$5,367,249,000	\$4,365,613,000	22.9
Materials	\$14,368,089,000	\$12,142,719,000	18.3
Value of Products	\$24,246,323,000	\$20,672,052,000	17.3
Value added by Manufacturing—value of products less cost of Material	\$9,878,234,000	\$8,529,251,000	15.8

As 1909 was a year of general prosperity and 1914 one of unusual depression, the later figures do not show the marked increase that more normal years would have indicated.

The kind of industrial corporations may be roughly given as follows:

Manufacturing.

(a) Iron and steel and finished products, such as automobiles, farming machinery, pumps, elevators, radiators, boats, ships, tin and detinning processes, bridges, factory and office machinery, household appliances.

(b) Electrical apparatus.

(c) Railway equipment manufacture.

(d) Rubber tires, shoes, clothing, hose.

(e) Smelting and refining, cement, brick.

(f) Agricultural and miscellaneous products, flour, brewery and distillery products, meat, biscuit, sugar, fruit, cotton oil, tobacco, paper, match, shoes, leather, gum, drugs, chemicals, fertilizers, moving pictures, phonographs, powder and ammunition.

(g) Publishing and educational.

Distributing and trading:

(a) Department stores, cigar stores, 5 and 10-cent stores, mail order houses, profit sharing.

(b) Cotton and woolen goods. Clothing.

Construction.

It will be noticed that mining companies are not included, because the principles of mining are entirely at variance with the principles of other business and

analysis of their securities must be made by materially different methods.

Corporations, e. g., steel companies, whose mining operations are only a part of their business, are included.



V

Advantages of Large Scale Enterprises

THE story of large scale enterprise is that of business dependent on rapid mails, railroads, steamships, telephone, and telegraph. Without these agencies amalgamations of manufacture and distribution would not be feasible. The control and operation of widely separated plants or distributing agencies depends directly upon these better transportation and communication facilities. Had modern transportation and communication facilities existed earlier, large scale enterprise would have started earlier. Under the present system of specialized economic life large scale enterprise is a necessity. Its advantages have proved as follows:

1. **Ease of financing.** Large corporations have access to the capital reservoirs of the entire country and in normal times to capital from the whole world at low rates. Small corporations are limited to capital from the few directly concerned and from local banks whose rates are high and whose financial strength may not always be sufficient for normal needs, not to consider expansion. Smaller corporations do not pay, from a standpoint of financiers, who will handle small issues of securities, if at all, only for exorbitant charges.

2. **Location.** Small businesses many times seem to

happen as far as locality is concerned. Large business enterprise is able, because of its financial strength, to choose locations nearer the market for its products or the source of raw material, as seems best, gradually closing those plants or distributing agencies not well situated from the economic standpoint. The closing of plants of the Steel Corporation and of the Corn Products Company are examples. Especially well located smaller corporations may not suffer in this comparison as do isolated plants not well located, but even the best of small corporations suffer in competition with a corporation which has plants and distributing agencies in all parts of the country. This is especially important when freight is a large item, as, for example, in iron, steel and cement. Corporations whose activities are widespread, for instance, chain stores, have the advantage of operating in communities with varied interests. General business may be poor in some of the cities operated in, but good in others, excellent in still others. A corporation operating in only one community finds business more or less influenced by the condition of business in that one community.

3. Advantages in advertising. Large corporations are best able to conduct national advertising campaigns.

4. Large scale plants are possible, using improved and economical methods of production.

5. Large scale production and distribution admit of purchasing in large quantities at consequent lower cost. With stronger financial resources larger corporations are able to buy at favorable times to supply future re-

quirements. In some industries corporations control the production of the raw materials and every stage of manufacture to delivery of the most finished products, as, for example, the United States Rubber Company.

6. Large corporations are able to avail themselves of the highest priced brains of the country in manufacturing and distribution, and yet are less dependent on the life or ability of any one man. Standards of production rate and of costs are possible. Comparative statements furnished at frequent intervals by the various plants or branches furnish a constant incentive to superintendents and managers. Such results are difficult of attainment in small corporations because the practices and costs of each corporation are usually guarded. In larger corporations each part is given the advantages of the best practices of the others. Large corporations are best able to carry on expensive but ultimately profitable experimental and development work.

7. Large corporations have the capital with which to develop foreign trade. Small enterprises could not develop the foreign field as the Singer Sewing Machine Company, the International Harvester Corporation and the United States Steel Corporation have done.

8. Corporations producing large quantities are able to make the best use of waste or by-products. The conventional example is that of fertilizer, horn, gelatine, glue and other products of the large meat packing plants; various waste manufactures of tobacco companies are even more profitable.

9. A corporation having several plants is not likely

to be crippled by fire or flood or strikes. The large corporation is less apt to be embarrassed by losses from personal accident suits.

PART II
BUSINESS FACTORS



VI

Fluctuations in Demand

GOOD business will hide many sins. Sins of promotion, of organization, capitalization, manipulation and management are well concealed behind the skirts of constantly increasing sales. As with Rufus Wallingford's colored carpet tack industry, good business may even reform the sinner. Business may be so good that decency is obviously the best policy to the most morally blunted. Consider the treatment of a certain railroad and of a certain tinplate product company, both controlled by the same hand. Business has been good with the industrial corporation.

Will the sales keep up—not only keep up, but consistently expand?—should be the security holders' first mental inquiry. Is the business a necessity like meat, bread, biscuit, oil, or cheap automobiles? Is its product in daily use satisfying a great, broad, growing demand? Does it, like the five and ten-cent stores, "sell to all classes of people small things which go to make up everyday life, and does it sell a large volume of these goods with the small margin of profit?" If it does, thrift-preserving and fortune-making possibilities are plainly indicated. Take, for example, the business of the F. W. Woolworth and the S. S. Kresge Companies. Sales

have constantly increased year after year. Even during the panic years 1907-1908 the sales of the F. W. Woolworth Company maintained a satisfactory increase.

Is the business one which fluctuates by season? Is it like the ice and chewing gum business, blessed by a sweltering summer and cursed by seasonable temperatures? Does it, like the rubber shoe business, depend upon thick slush and thick slush only for cheering sales reports? Is it a business like railway equipment or building construction, whose activities are intensified business barometers? Is it like the upper leather industry? In good times people buy shoes to throw away; in poor they have their old shoes patched. Is it like steel, that best recognized prince or pauper industry?

Recently a sand and gravel company issued securities capitalizing its business on a basis of current profits. It happens that the city in which this corporation operates has not only been largely rebuilt within the past few years because of a fire, but a large sewer system demanding immense quantities of sand and gravel has just been completed. Is not close consideration of future possibilities in such a case essential?

Consider carefully changes in demand. Remember the fate of the original American-La France Fire Engine Company, manufacturing horse-drawn equipment when the world demanded the strongest gasoline-propelled apparatus. Consider the Michigan Buggy Company, offering a splendid automobile about five years too late. Consider the brewery business, sustained only by the quarrels of its enemies.

Do style or fad control the gross receipts? If so, style or fad is the thing, and a gamble. During the bitterest times the wool industry has known in generations the manufacturers of pony fabrics for women's coats worked twenty-four hours a day and longed for more hours. Now how many pony coats do you see? No manufacturer of any article depending on style or fad can expect to have a dependable business. Remember bicycling. Two well-attested remedies exist to counteract the usual tendency of an industrial organization to suffer first from starvation and next from overeating: Diversification of product and careful conservation of earnings. Prominent examples of the efficacy of these remedies, if taken simultaneously, are the General Electric Company and the Western Electric Company.



VII

Diversification

LOOK at the activities of the American Can Company. It makes more than 43,000 different kinds of cans or containers. Besides the ordinary tin cans for food products, talcum powder, tobacco, soap, soup, meats, etc., the company makes the following articles: Adding machines, banks, bread-boxes, coffee-mill hoppers, confectioners' novelties, corrugated ware, cotton tags, first-aid kits, fiber boxes, paper boxes, fumigators, ice-cream freezers, insect-powder guns, japanned tinware, lead kegs, orchard heaters, display signs, paint strainers, peanut roasters, turpentine cups, fly traps, tin or sheet-metal stoves, signs, tinware, ash and garbage cans, oil cans, shipping cases of fiber, auto tanks, oil tanks, etc. One large factory at Joliet, Ill., runs exclusively on fiber and other shipping cases and boxes. Two factories run exclusively on tinware and all kinds of tin and sheet-metal products not to be sealed.

Suppose the American Can Company depended for its sales on the salmon packing industry, one of its largest customers. Salmon run in four-year cycles. After the big year there is a sharp drop for two succeeding years, then a large increase and then a phenomenal run. This is due to the habits of the fish, for which no adequate explanation has been advanced.

Suppose the corn packing industry formed the sole demand for the products of the American Can Company. Green corn was only half a pack in 1913. However, in 1914 the green corn pack was large, counteracting a small salmon pack.

With its many thousands of products, so many of them of widely diversified use, it is easy to understand that the business of the American Can Company is dependable. It is not surprising that after the year 1911 the president was able to report to the stockholders that, although the year had been an unfortunate one in many lines of industry, the business of the American Can Company had been entirely satisfactory.

The rapid strides of the Republic Iron & Steel Company are largely traceable to a careful diversification of product. This company seven or eight years ago was essentially an iron company. Under the chairmanship of J. A. Topping the mills have been transformed into plants making many forms of steel, and this has been done without fatally disturbing its original business. Moreover, the company manufactures profitable by-products, such as benzol and toluol. This careful diversification has made the Republic Steel Company one of the strongest in the industry.

The Lackawanna Steel Company, in contrast, has been greatly handicapped by making few products. It is essentially a rail-making corporation, although it does produce plates, structural steel and bars, and billets, blooms and pig iron. The demand for rails, like that of all other supplies for railroads, greatly fluctuates, and

as a result the Lackawanna Company has been violently injured in times of depression. For example, in 1911, with a capacity of 600,000 tons a year, its rail production was less than 226,000 tons. In that year the profits per ton of steel sold were 11 cents a ton. Unfortunately the company has not light finished product, such as wire and tinplate, commanding high prices, to fall back on when there is a lull in the demand for heavy steel in the railroad and milling trade. The management, however, has recently planned for a wide diversification of product which will greatly add to the strength of the organization.

The Prest-O-Lite Company is one of the many companies whose existence has been maintained by wise diversification of the use of its products. Its gas tanks were almost universally used before the advent of electric lighting systems for automobiles. The demand for the tanks would have dropped perpendicularly had the company not adapted its system and product to commercial fields, for the use of contractors, railroads and manufacturers in cutting and welding metals. As a result of its diversification the earnings have improved in spite of the change in automobile practice.

The United States Rubber Company's earnings have been maintained by taking up new lines. The tire business has at different times made up in profits for declines in sales of its older staple production. In the company's showrooms in New York are exhibited such varying products as toys, bathroom supplies, floor tile, rubber clothing, belting, packing, electrical insulating

material, football bladders, boots, shoes, arctics, "rubbers," rubber heels, a new composition sole for shoes, surgical supplies, gloves, rubber office bands, horse-shoes, fire hose, tires. Almost daily, new uses for rubber are discovered. Even fly swatters are now made from this essential, accommodating material.

The American Cotton Oil Company, through its subsidiary the N. K. Fairbanks Company, manufactures "Cottolene," "Gold Dust" and "Fairy Soap."

The American Linseed Oil Company has taken up the manufacture of cocoanut oil and produces the cooking shortening "Sawtay" which is successfully invading the grocery and delicatessen field.

Even the Gillette Safety Razor Company, probably looking ahead to the time when its patent will expire, has evolved a second product—an aluminum hot-water bottle—and it would not be surprising if other articles were soon made by this company.

The International Harvester Company is a well known example of a company having diversified products. It makes all kinds of implements for agricultural purposes.

The Crown Cork & Seal Company of Baltimore, whose stock sells at nearly a thousand dollars a share, has recently been working at a milk-bottle stopper. Its patents on bottle-cap machines and supplies for beer, pop, etc., are running out and the company is now attempting to maintain its earnings by going into other lines.

The Diamond Match Company, besides manufacturing matches, is engaged in manufacturing match-making machinery and in all sorts of lumber products. It has

a paper-board mill, block and shook factories, planing mills, box, sash, door, blind and veneer factories, and even conducts retail lumber yards.

A combination of the ice and coal business has long been recognized as a profitable one, not only to keep a reliable working force together at all times, trucks and working capital busy at different seasons, but also to equalize earnings. Abnormalities of seasons tend to equalize over a series of years, and a combination of ice and coal business will tend to have much more dependable earnings than either business alone.

The United Cigar Stores Company has successfully introduced soda fountains in many of its stores, particularly in the South. In competition with nearby stores it sells stationery and periodicals in some sections. Its necessity for renting has developed a real estate department specializing on subleases.



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VIII

Integration—Source of Supplies

ONLY secondary in importance to the demand for the products of a corporation is its control over permanently adequate sources of raw material. This is a serious question in many industries, such as iron and steel, paper, matches and rubber.

Companies controlling raw materials in all stages of manufacture have a tremendous advantage in times when raw materials are exceedingly high in cost. To be sure, in times of depression the advantages of integration are not so marked, but even then raw materials, such as rubber, pulpwood and iron ore, are seldom sold at a loss.

As is well known, many of the larger steel corporations are thoroughly integrated. The United States Steel Corporation and others own or control immense bodies of iron ore, coke and limestone. The Steel Corporation owns railroad and steamship lines, controlling the product from the red earthy ore to the finest of wire.

The International Harvester Company, besides owning ore and coal, a steamer, blast furnaces, a Bessemer mill, a blooming mill and merchant mills through the Wisconsin Steel Company, controls large holdings of timber in Missouri and Mississippi.

The United States Rubber Company is developing immense plantations of rubber trees in Sumatra. In 1910 it had about 90,000 acres of raw land. About 43,500 acres are cleared and planted with some 5,600,000 trees, of which over 500,000 are over five years old and therefore bearing. The company employs 14,000 natives and 5,200 new trees are planted every day. The outlay so far has been over \$9,000,000 and the plantation is by far the largest in the world.

The United Fruit Company owns banana plantations and railroads in Central America and the West Indies, as well as its well known steamship lines. In its sugar division it not only owns plantations and mills but plans to erect a modern refinery at Boston, making it the "only complete sugar process operated by a single combination of capital in the world."

Difficulty in securing dependable supplies of its product has led the American Ice Company to build artificial plants in principal markets and within a short time the company will probably gather or buy little natural ice.

There is a limit, however, to the capital which should be tied up in raw material. A corporation may be raw material poor. For example, if a corporation has too much capital tied up in iron ore deposits or coal mines, it may not be able to take out and profitably use enough of the raw material to pay good interest on the money invested. In some industries—for example, wool leather, cotton goods, and cotton oil—it is not usually practical to own or operate the sources of raw materials.

The American Cotton Oil Company could not well operate the immense cotton acreage necessary for the production of the cottonseed used. This oftentimes proves a source of weakness to the corporation because it finds difficulty in advancing the price of its finished product with the advance in the price of the raw material. Its products compete with those of decidedly dissimilar bases, e. g., lard and olive oil. In some years the source of materials becomes a problem of gravity for the company. Its president in a report for a recent year said the large cotton crop did not yield to the oil mills a proportionately large quantity of cottonseed, because in some sections considerable quantities became damaged, and a larger quantity than usual was used for fertilizer and cattle-feeding purposes, being relatively cheaper than commercial fertilizers or other available foodstuffs.

Another corporation has necessarily had constant trouble in securing a supply of raw materials. The Vulcan Detinning Company buys scrap tin, separates the tin from its base material by electro-chemical process and sells the two resulting products to steel manufacturers. The demand for the products is unlimited, but the company cannot buy up sufficient tin cans and other scrap tin to utilize its capacity.

A surprising development in relation to raw material took place in the American Chicle Company. The rebellions and revolutions in Mexico resulting in destruction to the company's plantations helped drive the stock from over 200 to a low of 34 and the dividend of one and one-half per cent. a month was entirely cut off.

With all the advantages which integration usually brings, it is not indispensable where favorable arrangements can be made for raw materials, semi-finished or finished parts. The automobile industry presents an example. Few if any companies make all the parts of an automobile. Some 150 manufacturers buy motors from a corporation which makes nothing else, and several of the most prosperous automobile manufacturers are simply assemblers of parts. One company has recently devoted much advertising space to an attempt to prove that it can offer best value because it manufactures practically the entire machine. Figures are given showing the profits saved on each part ordinarily purchased outside. These figures may be perfectly correct and yet other manufacturers might offer at least equal value and buy a large part of their units. It might pay to make the units. It might pay better to buy part of them, using capital in expansion of assembling plants, advertising or in purchases of raw material and units at favorable times, rather than tying up the money in shops requiring complicated processes.

It would not be practical for most automobile manufacturers to manufacture the iron and steel of which their product is mostly composed. Strange as it may seem, it would be much more feasible for them to enter the aluminum industry. An increase of two or three cents a pound in steel is a big advance, but is a small factor in the cost of a car. An advance of thirty to forty cents a pound in aluminum is a serious matter,

especially so because more and more aluminum is being used in each car.

Integration has often been profitably accomplished by amalgamation of interests—for example, a yarn company with an underwear mill. At the present time the amalgamation of the complementary American Linseed Company and the National Lead Company is widely advised. A merger of the Tennessee Copper Company, a producer of sulphuric acid, and The International Agricultural Chemical Company is suggested as a wise move to insure integration as well as to reconcile existing conflicting interests in regard to contracts.



IX

Standardization and Location

IN certain industries, of which perhaps shipbuilding and automobile making are as prominent as any, standardization is more necessary than integration. Except under war conditions American shipyards cannot compete with English yards, because of English standardization. One yard makes only a standard 5,000-ton steam vessel, another a 10,000-ton ship and so on, while each American yard builds to special order all kinds of vessels. Ships are turned out in England just as our manufacturers turn out standardized automobiles, with which the English automobile makers cannot compete at all, even in home markets and with American cars selling at much higher prices in England than in America. American shoes outsell others in the world markets because in this country factories specialize year after year on one type, men's high grade or women's medium grade for example, while abroad a small factory will make many styles in several grades for men, women and children.

The plants of many corporations, like Topsy, "simply growed." An inventor or local capitalist is apt to proceed to work out his idea in marketable form with little regard to expense of bringing raw material or convenience to market. In some industries, such as watch-

making, where freight is of minor importance, the geographic location of the plant is of little or no importance. On the other hand, with the Portland cement industry, for instance, location is of first importance. Another example is that of fertilizers. The Government estimates that not less than 2,500,000,000 tons of phosphate rock exist in Wyoming, Utah, Idaho and Montana, a supply so enormous as to be practically inexhaustible. Much of it is of higher grade than the Florida rock, yet this Western rock does not compete at all with the Southern product. It is not yet widely needed in the West and the freight from the Western States to the East is three times the worth of the rock on the Atlantic seaboard. It is evident, therefore, that as long as the Eastern rock holds out, companies owning Western rock may find little market for their wares. In the glucose, steel and automobile industries many plants have had to be closed because of unfavorable location.

The United States Steel Corporation has plants so situated with relation to raw materials and to markets that it successfully competes in all parts of this country except the extreme West and New York City. The Bethlehem Steel Company, because of its more favorable location in reference to this particular market, controls structural steel sales in New York City.

Yet the possession of several plants may prove a disadvantage. The International Steam Pump Company found that economy was impossible in the small scattered plants it acquired.

Other things being equal, companies having a country-

wide market for their wares, such as the mail order houses, the Woolworth Company, manufacturers of automobiles, etc., have the advantage over corporations operating in restricted sections, because business conditions are seldom uniform. A corporation operating throughout the country has an advantage of depending on the average requirements of all the districts.



X

Competition

“IF conditions of extreme competition forced the inception of early combinations,” says Dr. Arthur S. Dewing in his ‘Corporate Promotions and Reorganizations,’ “it is equally true that the attractiveness of each one resulted from the promise of the opposite extreme, that of monopoly. Expectations were high of materially increased prices and profits because of the elimination of competition. This was true even in industries where monopoly was impossible—for example, in leather and in corn products. In fact, certain corporations which were expected to monopolize their fields found that every movement made simply encouraged competition—competition at the hands of men whose plants newly constructed were in a better condition to compete than those of the larger corporations. The companies controlling the largest percentage of the business in their line were the quickest to go into the hands of receivers.” Dr. Dewing further states that the glucose corporation controlled 85 per cent. of the business and the asphalt corporation 80 per cent. of the business. Both were stifled by competition within two years.

Dr. Selwyn-Brown states that the International Steam Pump Company controlled over 90 per cent. of the steam pump business. The corporation was obliged to undergo

drastic reorganization. Yet practical, profitable monopoly is possible only through unusual business ability; the control of a raw product such as some local brick companies, patents such as those of the Mergenthaler Linotype Company and the Gillette Razor Company or the possession of a trade mark. For years the Eastman Kodak Company retained a practical monopoly in its field because of the trade name it controls. Large profits certainly invite competition. Striking examples are the phonograph and the motion picture fields.

As this country becomes more and more devoted to manufacture, it is reasonable to expect that competition will become more keen and profits per dollar of gross sales smaller, except, perhaps, in certain instances during times of abnormal prosperity. Take, for example, the field of electric apparatus and supplies. Contrast the cost of a most improved six-pound flatiron—three dollars—with that obtaining a few years ago. The General Electric Company reports a constant narrowing of profits in all lines.

In the past few years the profits on standard tin cans have steadily declined, even allowing for fluctuation in the price of tinplate base. The American Company sells cans at such prices that no company without facilities for cheap manufacture and an excellent selling organization can compete with it.

The United States Rubber Company has constantly reported a lowering margin of profit, offset, of course, as with many others, by increased sales.

In the meat packing trade, profits per pound are so small that "our coinage does not include a coin as small as the profit on each pound of goods."* For Swift & Company the profit is officially placed at less than one-quarter of one cent per pound, and if it may be assumed that the other packers fared substantially the same, then they must have handled in 1914 more than eight billion pounds of meat and by-products. In some ways the packing business has hopelessly retrograded. Fifty-five years ago Gustavus F. Swift, the founder of Swift & Company, began business by selling a \$20 heifer at a profit of \$10. It staggers the imagination to think of what the present colossal organization could earn at this rate of profit.

Henry Ford has dominated the low-priced automobile field by maintaining quality and lowering prices, each revision of price downward nipping dozens of potential competitors. He now aims to sell a Ford automobile, tractor and truck to every farmer for \$600 for the three.

Profits in sugar refining are small, and until recently were steadily declining, usually being less than one cent per pound for the refiner. Quoting the chairman of the board of directors of the American Company: "The National, Arbuckle, Warner, Federal, Revere and other independents compete with the American and with themselves for trade, and sometimes the small refiner is the one who makes the price fall. He can put the market down, but can never put it up. No refiner can maintain

*Boston News Bureau.

quotations in the face of price cutting. No one refiner can fix the price, and besides the competition among themselves, the refiners have to contend with the severe competition of beet sugar. Beet sugar from Colorado and California comes into the Eastern markets and is sold right in this state (New York) as far down as Albany."

Normally, beet sugar makers offer strong competition. They contract for their beets with the grower before they are planted and so have an advantage in being able to sell in advance of production, since cost can be approximated closely. The cane refiner knows only what a certain consignment of raw sugar has cost him.

The Corn Products Company has been continuously beset with the strongest competition. Since the organization of the Corn Products Company several large companies have begun manufacturing glucose, starch, etc., keeping down the prices and preventing the Corn Products Company from making satisfactory headway.

The downfall of the original Allis-Chalmers Company can be traced to severe competition, beginning in 1904, in heavy reciprocating steam engines, its principal product at that time. One of the largest electrical companies began to manufacture these engines and, being much stronger financially, it hurt the Western company. In return the Allis-Chalmers Company began to manufacture electrical apparatus, but the larger electrical companies were better able to survive. Following the drastic reorganization and prosperous war business the Allis-Chalmers Company is now in position to compete more favorably

The experience of the Jamestown Art Metal Company is illuminating as to the effects of competition. This company originally manufactured a line of stamped ceilings and other sheet-metal work. Competition became so severe as to cause reorganization. The original field was considered hopeless and the company simply changed its line, now making steel furniture, apparently with great success.

Take the leather industry. Here, size is of little advantage. Little equipment is necessary for economical production, and new tanneries can start up at any time and compete to fair advantage with those longer established. This is equally true of the malting industry.

As stated before, competition is no longer as ruthless as it used to be. Besides the force of government control, business men have come to recognize the superior logic of co-operation over more destructive methods. Yet the race is certainly to the strong, and plentiful resources and an unusual amount of brains are necessary for competition in conditions of the most ideal co-operation.



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PART III
MANAGEMENT



XI

The Personal Equation

ALMOST any meaty saying may be safely credited either to Lincoln or Emerson. I believe it was Emerson who wrote something to the effect that "an institution is but the lengthened shadow of a single man." Surely this has been true of most large corporations.

Were not the Westinghouse companies—at least until shortly before the founder died—the lengthened shadow of George Westinghouse? Is not the management of the United States Steel Corporation an expression of the personality of Judge Gary? Can we not see in the development of the chain store organizations the dominant influence of two personalities, F. W. Woolworth and George Whelan?

The importance of the personal equation is much greater in industrial than in railway management. There are over 250,000 miles of railway in this country and management has become so standardized that it is not difficult to shift men from one system to another without great loss or trouble to the railroads affected. Few industrial corporations are so standardized. The activities and problems of operation are so diverse that the personnel of management is of first importance and should be one of first consideration to the investor or speculator.

The ability of the managers to increase sales, to lower costs, to improve the quality of the product, to direct the policy, and to master the financial problems constitutes an important element in maintaining the standing of industrial securities.

Consider the problems of the United States Cast Iron Pipe and Foundry Company. Because of careful and skilful management it is operating one-half the plant facilities it needed a few years ago and is producing more pipe than was possible in the earlier years. Because of superior business ability the Standard Oil Company, even without questionable competitive tactics, would have reached an enormous size.

The head of an independent can company recently said: "The rise in Can strikes me as the most natural thing in the whole market. There is not another industrial company in America as well managed as that. We are constantly receiving reminders of its efficiency. Its managers lead and we follow; and we find we have to hustle to keep up with them. Because of the pace which they have set, the can-making industry of the United States is 50 per cent. more efficient than it was two or three years ago."

Whenever the success of a corporation depends largely upon the managerial ability of one or two or any few men the stockholders should be protected against the death of these men by life insurance. This truth is becoming more and more widely recognized, for in no other way can the loss of the managers of many corporations be compensated even in part.

However, even in industrials there is plainly a tendency toward standardization of personnel. Corporations such as the Western Electric Company have arranged that each important employee has an "under-study," so that the loss of any one man would not be disastrous. In the Woolworth stores the position of the store manager is by no means as dominant as it was in years past. The work has been so standardized that the management of even the far removed stores is done largely from the main office, this being made possible through comprehensive analytical daily reports sent in by the store managers.

Yet the limits of standardization must be recognized. For example: that the Riker-Hegeman chain of drug stores were not as great a success as anticipated was an open secret. Mr. Whelan's United Cigar Stores methods were introduced into the drug stores, but without corresponding result. Mr. Whelan could not delegate his personality to indifferent, mediocre, ill-paid and dissatisfied clerks in the responsible, specialized drug business.

*"The theoretical economies of large-scale operation may easily be overbalanced by the purely human element of inefficient ability." Referring to one particular corporation—the Cotton Duck consolidation—Dr. Dewing says: "Its long continued failure attests to the extreme difficulty of obtaining a man with skill of management sufficient to handle a large and scattered group of mills

*Dewing: "Corporate Promotions and Reorganizations."

as economically as the man of ordinary ability can manage a single mill."

In times of prosperity flourishing firms and corporations do not need to seek additional capital. They are besieged by offers from promoters and underwriters to recapitalize on a greatly extended scale. Naturally, owners are interested because recapitalization not only involves the creation of a ready market for shares so that part of it can easily be sold, but capital added to the business—capital which can be used in carrying out extensions and in taking up new lines.

It often happens that a business is entirely ruined by the addition of new capital. The owners of a business may be extremely successful in a small way, but prove helpless when the business is called upon to earn dividends on a large amount of newly injected capital. Funds so easily secured may be used less cautiously than profits saved out of earnings.

The McCrum-Howell Company furnishes a good example. Successful in its original lines of heating apparatus, upon recapitalization it plunged desperately into the vacuum cleaner business. This new line was not successful and the corporation went through a drastic reorganization.

The Rumely Company was another example. Upon being financed by New York security houses its former vice-president and general manager acquired inventories totalling \$16,500,000, besides contracts for materials aggregating \$4,500,000. Normal inventories should have been about one-fourth as large. Practically all the com-

pany funds were tied up in inventories. Yet it is widely known that the implement business requires large working capital and must extend long credits. The company lost \$6,000,000 in round figures in one year before going into the hands of receivers, the loss amounting to 43.4 cents for every dollar of gross sales.

That managers of large business enterprise should thoroughly understand the peculiar problems of their business will seem but natural. Hard experience proves that the prospective investor or speculator in industrials should find out whether the management has any intelligent idea as to its duties. Perhaps the most ludicrous failure of recent years was that of a corporation formed to take care of other corporations in difficulty. The managers of the Assets Realization Company had so little conception of its limitations that it assumed liability in lost hope enterprises and itself went through realization and liquidation.

The American Locomotive Company presents another example of a corporation which did not know the first essentials of a business in which it engaged—the manufacture of automobiles. Leaving aside controversial matter and quoting from the best recognized automobile manufacturers' trade paper *The Automobile*:

“The company lost money on every car put out from 1906 (when it began the manufacture of automobiles) to 1913 (when it gave up the business). The company put out 57 models in seven years, an average of over eight different models from the same factory each year.

To make matters worse, some of these were taxicabs, some passenger cars, and the majority trucks. Added to this impossible multiplicity of models was that of failure to standardize among these different ones. For example, the company built its own steering columns and parts, and built a different one for each model, excluding two truck types.

"The company built rear axles, a combination of stationary and live type of most excellent design, but of enormous cost. The special machine for making the stationary part cost \$58,000, yet it was needed for producing only 250 parts annually. Had the company built axles for other concerns, which it would not do, this expensive equipment might have been converted from a loss to a profitable investment. The annual meeting of the stockholders of the company is held near the first of August. The automobile organization did not usually know until this meeting even whether the manufacture of automobiles would be continued for the coming season. The engineering, selling and advertising departments did not know before this meeting what policy and program they could carry out for the following year, whereas at this late date rival companies had their models for the following year on the market, well advertised. Advertising appropriations that were asked for June were not forthcoming until the end of October or early November. When the engineering, sales and advertising departments would recommend an output of 800 cars, the purchasing department would buy for 1,600. In the factory, machines were found manufacturing parts for two weeks

after such parts had been altered in design or discontinued.

"Being impossibly late in getting out its products, the annual output would rarely ever be sold. The car program would be inflexibly fixed no matter how late the policy for the year was decided upon. The result was that the following July and August a large number of passenger cars would remain unsold at a time when other companies were marketing their models for the succeeding year.

"The policy of working over carried-over cars and carrying them along as new types for the following year was often followed. They were dismantled and changes in chassis and body made, changes which added enormously to the cost, so that when finally disposed of they were marketed at a great loss."

Comment upon such pretended management is unnecessary.

Able management is not crippled by changes of price in its supply of raw materials. Either the materials are brought ahead on exchanges such as the cotton and grain exchanges—this "hedging" as it is called adequately protecting against fluctuation of the price—or else they secure large quantities of raw material when it is cheap. Clever managers are experts on business and banking conditions. They follow cycles and buy raw materials at times of depression and when, fortunately, money is always easy. The old New England Cotton Yarn Company is an example of one whose managers neither protected themselves on the exchanges nor were clever

in buying at times when raw cotton was cheap. Immense losses were the result.

Find out whether the managers of a corporation are optimistic only at times of great prosperity which unexpectedly burst upon them, or whether they are prepared for prosperity in times of depression and, conversely, whether in times of prosperity they are prepared for depression. It is not by accident that in the prosperity of 1906 the United States Steel Corporation had some \$75,000,000 in its treasury, the largest amount up to that time, nor that it now has a very much greater fund in its treasury. The Steel Corporation was ready for the panic of 1907 and is ready for anything now.

If a corporation has been recently recapitalized it is of prime importance to find out whether the management will remain with the men responsible for success in the past, if they are large caliber men. The consistent success of the Woolworth, Kresge and McCrory companies is largely due to the continued interest of the founders. The failure of many earlier enterprises resulted from the retirement of the founders.

XII

Co-operation and Loyalty

IT is essential, in judging the securities of a corporation, to find whether it has the enthusiastic loyalty of directors, officers and employees. Find out whether the corporation shares its profits with its employees, or offers its securities to them on attractive terms so that the employees become partners in the business. Freedom from labor troubles is one of the most important considerations with industrials. There is little likelihood of serious labor troubles in plants such as those of Proctor & Gamble (Ivory Soap), General Chemical, and the United States Steel Corporation. The men are partners in the profits. Naturally, such conditions create a spirit of loyalty and dissipate the natural distrust of labor against capital.

The labor situation is a source of weakness to corporations such as the United States Realty and Construction Company and the General Electric Company. "Welfare work" and profit sharing are not only creditable but are business necessities, paying for themselves time and time again.

Find out whether the corporation is generous with its producers of business. Take the Bethlehem Steel Corporation. No salary in Bethlehem exceeds \$10,000 per annum, yet some of Mr. Schwab's associates receive as

high as \$500,000 a year, but they must earn it. Mr. Schwab determines a unit cost in every department and then sets the premiums for increases in business efficiency and economics by such a ratio as to derive the largest profit from every department. The general staff shares in a general division, but the men who make the profits in their departments have their percentages for their wage gain. Where Mr. Schwab has set the unit standard at \$1 for cost, and a manager or superintendent gets 1 per cent. for reduction down to 95, he not only gets 2 per cent. for the next 5 per cent. reduction and 3 per cent. for the next 5 per cent. reduction, but the highest rate applies on the total reduction, so that there is every incentive for a man to strive for the last dollar of efficiency.

A sales agent for the Bethlehem Corporation is not a scambler for gross business, for he gets no commission on his sales. He gets a percentage of the profits made from the goods he sells. He is therefore a hustler for profits, and not for total sales. He is not a mere sales agent. He must become a merchant seeking profit in his sales, studying markets, finance, plant capacity and fundamentals of business.

At its inception the American International Corporation ticketed a generous amount of its shares for the managers, providing immediately an attractive incentive for unusual efforts.

XIII

Financial Control—Alliances

WHO controls the corporation? Not only are they successful, but are they trusted in the banking world? Many a man is successful whose credit is not good and whose corporation will stand little rough weather on that account. On the other hand, the right management, whether or not strong financially by itself, will command financial backing.

In many instances strong financial support will carry through a corporation which would otherwise succumb. Take the American Linseed Company for example. It is largely controlled by Mr. Rockefeller, Sr., who has provided such funds as are required for a loan, without collateral, an open book account, subject to draft as needed and to payment as the company has funds, at the rate of 5 per cent. per annum, interest paid on average daily balances only.

The Colorado Fuel and Iron Company is also under the same strong financial control and support. Both companies remained economic failures for years, not earning interest return on the capital risks involved. Yet both companies are coming to have good credit from their own strength. Strong control has been their only means of salvation.

A corporation's business alliances and contracts may require scrutiny. What are its relations with those who furnish its raw products? It is not long since that one of the largest leather companies, although exceptionally strong financially, was crippled in earnings because of serious differences between the company and the producers of the hides. On the other hand, the American Can Company has obtained its principal raw material, tinplate, at rates cheaper than those quoted to its competitors.

The General Electric Company and the Westinghouse Electric & Manufacturing Company had, from 1896 to 1911, a working agreement whereby they exchanged patents and avoided cutthroat competition which exists in some other lines. Important patents having expired by 1911 a renewal of the contract was not considered necessary. The General Electric Company has a working alliance with the American Locomotive Company in the manufacture of electrical locomotives and with the Entz Motor Patents Corporation in the manufacture of gasoline-electric propelled motor cars. The Electric Company has a large stock interest in the Entz Corporation. The Westinghouse Company has a working agreement with the Baltimore Locomotive Company for the manufacture of electric locomotives.

Contracts between corporations sometimes result surprisingly. The International Agricultural Chemical Corporation had a contract with the Tennessee Copper Company to take that company's production of sulphuric acid at \$4.81 a ton up to 225,000 tons a year. The price

proved intolerable to the International and the amount was reduced to 180,000 tons, the purchaser retaining, however, an option on production above this minimum. Upon the beginning of the European war, sulphuric acid prices went to record figures, and a compromise was made this time in order to placate the Tennessee Company. At one interesting stage the Tennessee Company sold a large amount of acid to Russia, counting on a surplus production which the International firmly claimed under its contract. Under pleas of necessary repairs the Tennessee shut down its plant entirely, later, however, rushing to catch up with arrears of its deliveries.



XIV

Financial Policy

THAT a corporation is an artificial personality created by law is a truism. Why make or feel a mystery in regard to corporation financial and business policy? Why not think of a corporation as an individual and judge it as you would an individual?

Consider the S. S. Kresge business before it became an artificial personality. The first Kresge store was opened in Detroit in 1897 with a capital of \$6,700. In 1911, by diligent attention to business and reinvestment of surplus earnings, the stores did a business of \$7,923,040 and earned \$470,866 from sixty-four stores. This was before the incorporation of the business in 1912.

Wasn't the progress of the business analogous to that of any clever private individual whether he be a merchant, doctor, lawyer, or mechanic? Doesn't the careful man in any line save as he is able and carefully invest, gradually becoming independent and wealthy? The Kresge business is but an example of an independent effort.

The Crown Cork & Seal Company of Baltimore is a good example of an artificial personality, a corporation which was prudent. Surplus earnings some years exceeded the total issue of stock. Yet it conserved

its earnings, paying but 8 per cent. for several years, then gradually increasing until it now pays 20 per cent. Recently it has been entirely justified in declaring extra cash dividends. But it saved until it could well afford to spend.

It was through careful saving that the Republic Iron & Steel Company built up its enormous diversified steel plants.

The original Standard Oil Company carefully conserved its cash and was always prepared to take advantage of the everchanging conditions in the oil fields and the oil markets. It always had saved up huge amounts for exploring, experimenting, and purchasing. The wisdom of this farsighted policy is still evident in the security markets.

From its organization to 1916 the United States Steel Corporation has paid common-stock holders an average of only about 3 per cent. in dividends. Had it been reckless it could have paid 5, 6, 7, or even 8 per cent. and not spent all its earnings, but it never would have had the strength it has to-day. In times of depression it would have had to defer the preferred stock dividend and have been brought close to bankruptcy. As it is, the corporation has more than doubled its steel capacity since 1901. It has spent much more than \$100 for each share of common stock in new construction and acquisition of property. To-day the corporation is a bulwark of physical and financial strength. It has been prudent; even so, it could have been more careful in regard to the spending of its surplus.

By all means it is a better long range financial policy to conserve earnings until stable dividends can be paid. Had the United States Steel Corporation paid 1, 1, 1, 1, 2, 2, 2, 3, 3, 3, 3, 4, 4, 5, 5, 6, 6 per cent., which averages practically the same as paying as it did, 2, 4, $3\frac{1}{2}$, 0, 0, 0, 2, 2, $2\frac{3}{4}$, $5\frac{1}{2}$, 5, 5, 5, $4\frac{1}{4}$, 0, $4\frac{1}{2}$, 0 5, 6 per cent., the stock would have ranked much higher than it has in past years.

If the corporation afterwards formed to take over the Kresge business had become reckless, and had spent not only the cash it earned and saved, but more than that, would it not have been in the same position as a spend-thrift individual? Is not the corporation which earns \$10 a share and spends \$10 a share or more in dividends as reckless as the man who earns \$10 and spends that much or more? Is the result of reckless corporation action any more uncertain than reckless individual action?

The best known examples of common stocks now valuable but years ago almost worthless are the United States Steel Corporation and the Bethlehem Steel Corporation. The common stock of the Bethlehem Steel Corporation was considered of little value for many years. Dividends on the preferred stock were withheld and every available dollar carefully used in enlarging the scope of operation and in extending its sources of raw materials. The results, though spectacular at present because of war orders, would have been just as certain had no war begun. The history of the United States Steel Corporation is somewhat different because

of its payment of the preferred dividend. However, dividends on the common stock were kept down with some evidence of conservatism and the assets were built up from surplus so that now well over \$100 per share of common stock is represented by actual assets.

Some managers seem to believe in the declaration of unearned dividends as a means of keeping up the credit of a corporation. Nothing could be more disastrous to credit, but this false doctrine persists. Unwarranted dividends plainly impair financial resources. Then when a general depression or any other untoward circumstances appear the invited end occurs. Dividends whether or not warranted certainly do give the appearance of prosperity to the unsophisticated.

It is the old story of eating the cake and having it too.

Comparatively few people have breadth of vision; comparatively few are willing to postpone immediate pleasure for the sake of greater future pleasure. "Every evidence shows that had the earlier interests been willing to forego immediate profits and conserve the funds of the corporation the enterprises could have been placed on a sound footing and the men (most interested in the price of the securities) would themselves have secured vastly greater returns. The failures of the Glucose Sugar Refining, the American Malting, the United States Realty and the New England Cotton Yarn Companies were the result of payment of dividends on stock which in each of these cases were unwarranted. They represented, ex-

cept for the subterfuges of accounting, an actual impairment of capital.

“The haste with which these early dividends were declared was at variance with the simplest principles of sound finance. In the majority of cases dividends were begun almost immediately after the organization of the corporation, before an opportunity had been given for the new enterprise to manifest its independent earning power. In very few cases did the directors have unquestionable evidence from a careful audit of the books to prove that the dividends had been earned, and the basis of their judgment was seldom more than a mere estimate, which failed to make adequate provision for depreciation.

“In the instance of the American Malting Company, subsequent revelations showed that the directors could not have known what the earnings actually were at the time the first dividend on the stock was declared, because in the court testimony it appears that the general books had not then been balanced from the books of the branches. Similar conditions probably existed in other corporations where the methods of accounting have not been subject to as rigorous a scrutiny.”*

Another example of reckless dividend payment is that of the old Union Bag & Paper Company. In its first year, after payment of the 7 per cent. preferred dividend, there was left a surplus of \$724,169, but after that time the company was not justified in paying the full rate

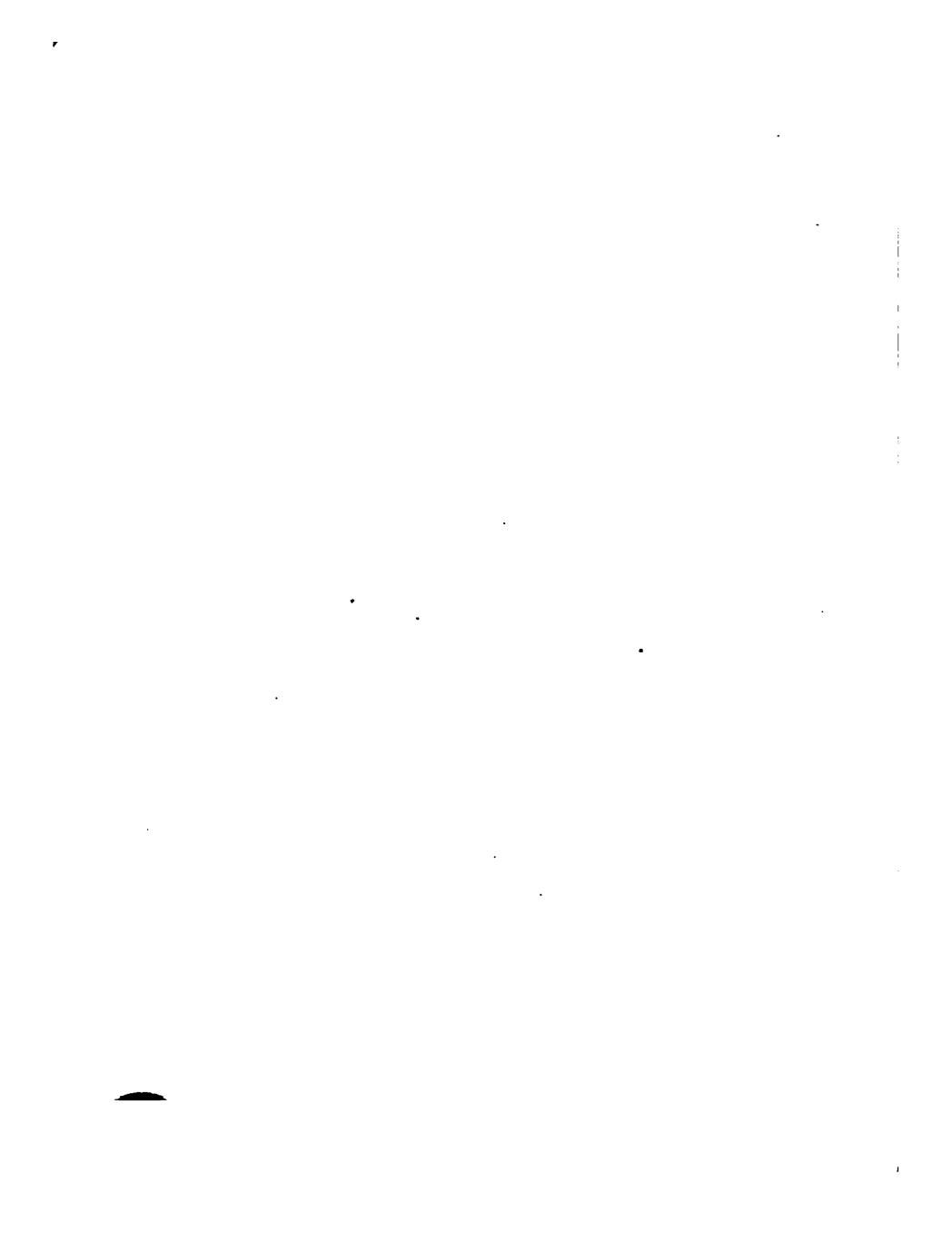
*Dewing, 549, 551.

in any year, although it was paid for nearly eight years before any reduction was made. During those eight years very little was charged off for depreciation, and through that period property and equipment expenditures were skimped. Following a bond issue authorized in order to provide for extensions and to provide an adequate supply of raw material the rate was reduced in 1906 to 5½ per cent. and to 4 per cent. for each succeeding year to 1912. In 1913 3 per cent. was paid and none at all since until 1916. In 1912 two machines, costing \$250,000, reduced the cost of paper \$4 a ton. Had the corporation been more conservative in dividends many other such improvements could have been provided. Unusual general prosperity has brought better prospects to this hitherto weak, competition-ridden corporation. It has been reorganized, the new corporation having but one class of stock: common. The preferred stock, with unpaid dividends and the old common, were pruned in the exchange.

The American Ice Company, after a somewhat disastrous early career, reformed and is now on its way to security. The corporation has retired a large note issue out of earnings, has worked up a respectable working capital, and has built artificial ice plants out of earnings.

In 1887 the Midvale Steel Company was in trouble largely because of excessive dividends. Outside interests obtained control, and for ten years no returns were made to stockholders and all the earnings were conserved. Profits increased until they far outmeasured the capitali-

zation of \$750,000. In 1897 dividends were again declared. This is the corporation which added subsidiaries to itself and reported profits of around \$30,000,000 in a single year after the original stock was turned in for \$230 a share cash. It is interesting to figure this price on a basis of the stock as before February, 1910, when a dividend in stock of 1,200% was declared.



PART IV
BALANCE SHEETS—DEBIT



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XV

Lack of Uniformity

SKILL and analysis are apt to be unavailing if expended upon information which is, in fact, misinformation. Nearly all large corporations publish annual reports, available upon request to the secretary. With the increase of publicity these annual reports are increasingly valuable. In periods of prosperity they are usually conservative. The managers take care that the depreciation is well taken care of, that machinery is well maintained and that bad debts are eliminated. It is not at all unusual that actual conditions are much better than as shown by the published reports. Hidden assets in the form of unwarranted reserves for depreciation are created, property is acquired out of surplus earnings which does not appear in the balance sheets, a store of fat is secretly laid up against the lean years which follow those of plenty.

In times of adversity corporation reports must often be viewed with skepticism. With earnings impaired managers are inclined to skimp depreciation, maintenance and reserves in order to make a creditable showing. It follows, then, that with our customary sequence of prosperity and depression the interpretation of accounts submitted must usually be made with consideration as to general conditions.

It must be remembered that as yet no uniform systems of industrial accounting are required. Many income accounts are noteworthy for what they omit or conceal rather than for what they convey. The securities of corporations which do not publish adequate reports must often be considered pure speculations. The requirements of the Federal Income Tax have done much toward showing the possibilities of adequate accounting. The Federal Trade Commission has power to require reports from corporations as it sees fit. It is reasonable to expect that uniform forms of accounting will eventually be provided for the different industrial lines as they have for railways.

XVI

Certificates of Public Accountants

TOO much reliance has been placed upon the indorsement of public accountants of income accounts and balance sheets. Of course an uncertified financial report is like an unsearched real estate title. But as there are various grades of skill and reliability in the field of title searching, just so are there various grades of skill and responsibility in public accounting work. Nor does it necessarily avail that the financial report be certified by a public accounting firm of large size and many offices. Two of the largest firms, whose certificates are found on many large corporations' reports, do not enjoy a good reputation among accountants. On the other hand the writer has been employed by two of the largest firms in the country, whose standing is above suspicion. Firms do exist which will, for a small fee, certify to balance sheets which are entirely if not criminally misleading. It is unfortunate that the public accounting firm is not chosen by the stockholders as is the case abroad. In this country the officers of a corporation choose the auditors and naturally they will find such as will certify to the accounts as the officials present them.

One especial abuse in accounting work is the bidding system. Many corporations do not realize the importance of thorough work, and actually solicit bids for the

work. Fancy submitting questions of a law involving millions of dollars to the lawyer making the lowest bid for the case! Another source of abuse is the "partial audit," the accountants being employed to audit only part of the accounts or part of the books, while the financial reports, as submitted to the public, appear to the unsuspecting to be founded on books of account entirely vouched for.

The first step to be taken by the prospective investor or speculator is to find that the records are certified by a firm of public accountants, the second is to ascertain the reputation of the public accounts, the third to examine the nature of the certificate. Sometimes it means little that books of account are O. K.'d by a firm of public accountants. It may simply mean that according to the contract made by the company with the accountants the certificate proclaims that the books are in balance, with no responsibility whatever as to the reliability or truthfulness of the accounts themselves. Many contracts specify that the accountants are not paid to go back of the books themselves, the entries in which may be entirely incorrect. Again, the accountants may not audit anything except the main books of a large corporation, the books of subsidiary corporations remaining untouched.

Early in his business experience the writer had charge of the books of a subsidiary of a corporation whose stocks were listed on the New York Stock Exchange. The subsidiary corporation erected a very large office building. The shell was completed and charged, as it should be, against capital. The building was completed,

partitions and fixtures were installed, and this large amount was treated as an expense under the blind of "Fixtures for Tenants." One of the largest firms of public accountants certified to the financial records of the parent corporation, never even touching the subsidiary books, which would have disclosed concealed assets running up into six figures.

To be dependable an accountant's report must accept full responsibility for all books of record, including all subsidiary books and all sources of entries made thereon as well as the valuation of all property listed. If this be found over the signature of a firm of public accountants having a proper reputation the books of account may be accepted with assurance. It must be remembered that accountants take upon themselves no responsibility for which they do not show obligation in their certificate.

The smash in the McCrum-Howell Company is one of many examples of companies ending in a most spectacular failure soon after the publication of a wonderful financial report signed by a firm of public accountants. It transpired that a large part of the assets appeared on the books but no place else.



XVII

Complete Balance Sheet

THE balance sheet first demands our attention in the analysis of accounts. This is simply a statement showing, or purporting to show, the financial condition of a company as of a given date, usually the last day of the company's business or fiscal year. It is a statement of what the company owns and what it owes.

An annual report usually contains both a balance sheet and an income account. Both are entirely necessary. Years ago the American Sugar Refining and the Standard Oil Company published balance sheets but no income accounts. Those interested in the securities would then attempt to figure the earnings by comparison of the latest with prior balance sheets, taking into consideration the dividends paid during the past year. These calculations proved an interesting pastime but did not appreciably lessen the advantage of the few insiders who knew the actual status of the company and its earnings.

A company may have splendid earnings, yet *if*, like the old Westinghouse Electric & Manufacturing Company, it has large maturing debts it cannot take care of, or if it lacks cash much needed for other purposes, it is not safe. The balance sheet only will disclose the true state of affairs.

Some corporations, equipment companies for example, are engaged in a business showing violent fluctuations. Some of them, particularly the American Car & Foundry Company, are well prepared in financial strength for depressions and an income account for a poor year without a balance sheet would not give a fair impression.

For convenience in following these articles a commonly accepted form of balance sheet is given. Several of the items are supported by schedules of the accounts making up the major items. Amounts in figures are purposely omitted.

As industrial enterprises differ so materially in nature of business, it cannot be expected that all corporations will present balance sheets in forms even approximately approaching the one given. It is hoped, however, that the balance sheet and schedules will suggest to stockholders of some corporations where the financial statements they receive should give more explicit and detailed information.

Complete Balance Sheet

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THE MONTVILLE MANUFACTURING COMPANY.

General Balance Sheet December 31, 1916.

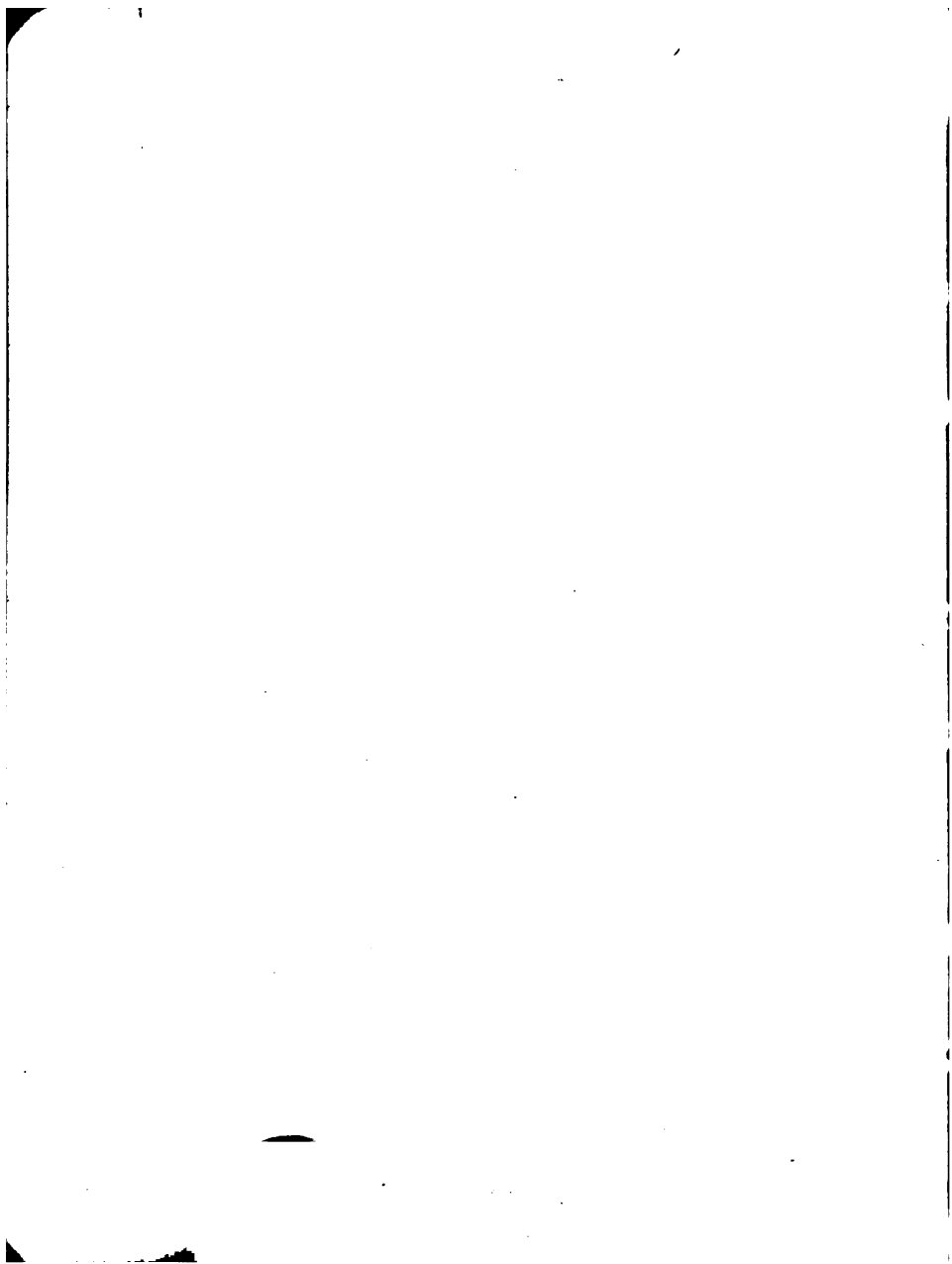
<u>Assets.</u>	<u>Capital, Liabilities and Surplus.</u>
Fixed or Capital Assets.	Capital Stock.
Plant and Property. Sched- ule 1.	Preferred:
Investments. Schedule 2.	Authorized.
Treasury Stock at Par.	Less—Unissued.
Treasury Bonds at Par.	Issued and Outstanding...
Patents.	Common:
Trademarks.	Authorized
Goodwill.	Less—Unissued.
Working and Trading Assets.	Issued and Outstanding...
Inventories, Schedule 3.	Capital Stock Subscribed..
Current Assets:	First Mort. 5% Bonds.
Cash. Schedule 4.	Authorized.
Securities. Schedule 5.	Less—Unissued.
Accounts Receivable.	Issued and Outstanding...
Accrued Interest on Bonds Owned.	Five year 6% Notes Issued and Outstanding.....
Dividends Declared on Stocks Owned.	Current Liabilities:
Drafts and Notes Receivable.	Taxes Accrued
Interest Accrued on Drafts and Notes Receivable.	Payroll Accrued
Due from Subscribers to Capital Stock.	Accounts Payable.
Total Current Assets.	Notes and Drafts Payable.
Sinking Fund for Bonds. Schedule 6.	Expenses Accrued.
Insurance Fund.	Interest Accrued on Notes and Drafts Payable.
Pension Fund.	Dividends Payable.
Deferred Assets. Schedule 7.	Interest Accrued on First Mort. Bonds.
	Interest Accrued on Five Year Notes
	Total Current Liabilities...
	Reserves. Schedule 7.
	Profit and Loss Surplus.
	Capital Surplus
Total	Total
	Contingent Liabilities with particulars.

On the left, debit or asset side of the balance sheet are usually found three classes of accounts: fixed, capital, or permanent assets; current or quick assets, and deferred assets. On the right hand, credit or liability side of the balance sheet, are normally found capital liabilities, i. e., stocks and bonds; current liabilities; deferred liabilities and surplus. The classes of accounts on both assets and liability sides of the balance sheet will be considered in detail.

SCHEDULES SUPPORTING BALANCE SHEET.

1. **Plant and property:**
 - Land and buildings.
 - Additions to buildings.
 - Plant equipment.
 - Horses, wagons and motors.
 - Furniture and fixtures.
2. **Investments:**
 - Securities owned: Names and amounts of stocks and bonds with dividend and interest yield, price paid and present market price.
3. **Inventories:**
 - Raw Materials.
 - Manufacturing department.
 - Finished good, manufacturing.
 - Finished goods, trading.
 - Shipping department.
 - Coal, oil and waste.
 - Stable and garage supplies.
 - Postage, stationery, &c.
4. **Cash in hand and on deposit:**
 - Cash in bank.
 - Impressed cash, and Expense fund.
 - Freight deposit.
5. **Securities:**
 - See Schedule No. 2.
6. **Sinking Fund:**
 - See Schedule No. 2.

-
- 7. Deferred charges to expense:
 - Discount on bonds.
 - Legal expense deferred.
 - Organization expense.
 - Insurance prepaid.
 - Rent paid in advance.
 - Taxes paid in advance.
 - Advertising.
 - Advances for subsidiaries:
 - 8. Reserves for:
 - Depreciation, Buildings, Equipment, etc.
 - " Outside investments.
 - " Subsidiary securities.
 - " Treasury stock.
 - " Treasury bonds.
 - " Raw materials.
 - " Current asset securities.
 - " Accounts and notes receivable.
 - " Sinking and other fund securities.
 - Extinguishment of assets.
 - Dividends.



XVIII

Fixed or Capital Assets

FIXED, capital or permanent property assets consist of land and buildings, machinery, tools, equipment patents, trademarks, goodwill, horses, wagons, motors, furniture and fixtures and investments. All the fixed assets, excluding investments, are often combined in one item: Plant and Equipment. When set down separately the amount is presumed to represent the actual value of the property. If the amount given is explained as "Plant and Equipment," inquiry is open as to the date and basis of valuation as well as to the experience and reputation of those whose valuation has been taken.

Not infrequently are the valuations of fixed assets, however stated, largely fictitious; in fact, simply an arbitrary amount to offset the amount of stocks and bonds on the other side of the balance sheet. Such assets are usually largely water, whether listed as partly goodwill, which is usually water, or not.

The combination of tangible asset accounts with intangible assets such as goodwill, patents and so forth, not only baffles successful analysis of the real value of the assets and the amount of water, but also prevents determination as to whether the proper amount of depreciation is being charged from earnings by the corporation.

Reliable public accountants who assume responsibility for the valuation of assets verify them by their own count and appraisal; secondly by the co-operation of technical engineers and professional appraisers. A large firm whose headquarters is in Milwaukee makes a business of accurate appraisals. Its findings may be accepted without reserve. In bond and stock circulars this statement is often found: "The following figures show the value of the plants as appraised by conservative independent authorities." Such statements, unfortunately, have proven entirely unreliable in many instances. Appraisals as well as certificates of financial statements in general must be considered with decided skepticism. Nothing can be taken for granted simply because it is on paper, even on paper from the offices of the best security dealers in the country. They make mistakes. It is for the investor or speculator to avoid assuming the loss arising from such errors.

Many an appalling industrial wreck has been caused, many a promising business has been blighted, because of overvaluation of obsolete fixed assets or the failure to preserve the original value of the fixed assets, plant, machinery and equipment.

A recent example of overvaluation of plant assets was in the General Motors Company. It was incorporated in 1908 to take over some 26 automobile and accessory companies. As was the case with the Rumely, its management bought raw materials and equipment with a lavish hand and with little regard for the effect on the

company's finances. By 1910 General Motors was in bad condition. A large banking house took charge and charged off about \$10,000,000 representing scrap material and useless machinery formerly booked as assets. With improved management the company made steady progress after this drastic procedure.

The collapse of the New England Cotton Yarn Company, previously mentioned, was due to taking over and issuing securities against plants woefully overvalued and largely obsolete, as well as to poor management.

The same was true of the National Starch Manufacturing Company and the Glucose Sugar Refining Company. Even after the starch and glucose companies were merged and the resultant corporation placed under the control of E. T. Bedford it was authoritatively stated in the Government trust suit against the corporation that "when the present organization took over the properties, they were in a dilapidated condition, the machinery was antiquated, buildings unsuitable for the manufacture of the company's products, and costs at a level that would not permit of a return on the investment."

In fact after reorganization of the present Corn Products Company its president stated: "During the past fifteen years three successive reorganizations of the industry have been rendered necessary because of the payment of greater amounts in dividends than was consistent with the proper up-keep of the plants." This should emphasize the importance of ascertaining the condition of the plant and equipment of corporations before investing in their securities.

Naturally, unmaintained plants, or plants obsolete because of changes in process, cannot compete to advantage with those properly maintained and with the latest equipment. The American Malting Company for many years was tremendously handicapped because of owning plants which were entirely out of date and suited only for the production of malt by the hopelessly expensive and slow "floor process." Likewise the Pennsylvania Steel Company, recently taken over by the Bethlehem Steel Corporation, was unable to compete in ordinary times with more modern and economical plants. Only the unusual market conditions of the war boom enabled the plants to reopen to advantage. In 1914 the president said it would take \$10,000,000 and three years to put the plant of the company in shape to compete with those companies which are being operated by the most modern and economical methods.

Some corporations claim to offset depreciation by repairs, renewals and improvements, without making the conventional depreciation charges. Such claims usually will not bear the strict investigation which they call for. Such substitute measures usually suggest a lack of method of providing for the depreciation of property which does not promise well for the security holder.

Even granting that plants may be "maintained" to original capacity, in these days of rapid strides in industrial processes entire plants, not to say parts of equipment or certain processes, may become obsolete. Such was the case with the complete plants of the American Malting Company. It is necessary, therefore,

that depreciation, including obsolescence, be provided for adequately.

To be sure, part of the "Plant and Equipment" does not necessarily depreciate at all. For this reason land and buildings should be separately itemized. The land itself may increase in value and sometimes buildings depreciate slowly. When accounts are not separately stated, analysis is to just that extent doubtful and the security of the investor or speculator compromised.

Depreciation should in most instances bear close relation to the business of a corporation. Of course a plant may rust out more quickly than it can wear out. But with companies owning large sources of raw materials depreciation on raw materials not rapidly depleted may be nil. This is true with the holdings of ore and coal lands of steel corporations, woodlands of paper and match manufacturers.

It is obvious, therefore, that while it is essential that all fixed assets of a corporation must be preserved, the rate of depreciation of wear, tear and of the obsolescence of these assets varies in different industries and conditions. Referring again to ore land, one is reminded of Mr. Hill's remark that "iron ore does not go out of style."

From five to ten per cent. is an average rate of depreciation on manufacturing plants, not including sources of raw material. Theoretically a good steel plant, for example, depreciates at the rate of ten per cent. a year, provided ordinary repairs are made.

* If a company has but one plant it is almost impossible to keep it at full value year after year, because it depreciates as a whole. It is possible for a company to keep its plants in as good condition as possible and to add new construction out of earnings and so counterbalance loss suffered elsewhere by depreciation. Usually new construction out of earnings does not occur and unless a definite policy of depreciation charges is adhered to, an evil day will come when the plant which has been well "maintained" out of earnings will suddenly be found obsolete if not worn out.

In actual practice two general methods of depreciation, aside from "maintenance," are commonly used. One is to keep the assets at the original or arbitrary value, setting up a "Reserve for Depreciation," on the liability or credit side of the balance sheet out of the earnings to compensate for depreciation and obsolescence. The other is to charge off earnings directly against the assets, showing depreciation and obsolescence allowance by exhibiting each year a declining value of original assets.

Theoretically, at least, the first method seems preferable, because the original and additional assets are at all times visible, with the reserve on the other side of the balance sheet counterbalancing the loss through depreciation and obsolescence.

The Liggett & Myers Tobacco Company has kept its plants from dangerous depreciation and obsolescence in two ways. Quoting an interview of some little time

*See Cole—Accounts 96-106.

ago: "The real estate, machinery and fixtures amount to \$7,165,038, against which there is a reserve for depreciation amounting to \$2,021,379. As a matter of fact, the real estate has appreciated in value, and I may state that the physical condition of all property is in better condition than ever before. Modern machinery has been installed, and everything in connection with the various manufacturing plants is kept up to date."

The United States Steel Corporation has maintained its properties in splendid condition. It has kept its property account at relatively the same figure year after year by offsetting a "Reserve for Depreciation," which at the end of the fiscal year 1914 amounted to \$105,757,-588. In fact, Mr. Herbert Knox Smith, of the United States Bureau of Corporations, reported that the United States Steel Corporation had from April 1, 1901, to December 31, 1911, charged off \$43,077,687 more for depreciation than was necessary; in other words, creating a hidden surplus to this extent by charging off this amount of property which retained its value. The technical depreciation charges of the United States Steel Corporation are but the beginning of what it has done to maintain its position out of earnings.

As is the case with certain other steel manufacturers large sums have been spent for renewals, improvements, and so forth, which have much more than offset the depreciation and obsolescence. When it is considered that largely as a result of additional exploration work United States Steel seems to have as much iron ore in sight to-day as at any time since its organization, and is better

fortified from the standpoint of fuel than it was on the day it began business, and this without material addition of capital, it is evident that the Steel Corporation has not only maintained its position but has greatly bettered it. To be sure, analysis of individual classes of assets is impossible because they are "lumped," yet the depreciation and other charges out of earnings have been so heavy as to leave no possibility of skimping. In fact, so much has been charged off for depreciation, used in extraordinary replacement and in new construction, including the Gary works, that the common stock, once entirely "water," is now represented by over par in tangible assets.

The General Electric Company is another corporation whose assets have been maintained and greatly increased out of earnings. In the past fifteen years it has charged off annually for depreciation an average of about twenty-six per cent. of book valuation. From 1901 to 1908 depreciation charges in percentage to book value were even greater than those over later years. The highest percentage was forty-six per cent. in 1902, the lowest ten per cent. in 1909. It is apparent, therefore, that no value would remain on the books at all were it not that new construction has continually been made. At the beginning of the year 1915 General Electric valued its plants at \$31,063,332. During the year it added \$4,485,069 in real estate, machinery, patterns and fixtures. It charged off for depreciation \$5,985,069 from the same class of accounts, leaving the property accounts totaled at \$29,563,331, smaller than at the beginning of the year.

The company values its vast number of patterns at nothing whatever, and has kept the ratio of book value to each square foot of floor space at the ridiculously low value of about \$2 for many years past.

Of course, the plants of the General Electric Company are worth several times the value on its books. Assets valued at less than their worth proclaim strength, which will ultimately benefit the security holder. Though unnecessary depreciation allowances on any property create hidden assets to just the extent of the excess depreciation, yet the practice is conservative and harmless because done openly and because it shows up in income accounts and in the balance sheets open to all. The security holder is not deceived into underrating his holdings and selling them at a loss as in cases where fictitious expense accounts, such as "Alterations for Tenants," are charged for new capital assets of construction.

It seems scarcely possible that the General Electric Company could ever have suffered the pangs of adversity. Yet after beginning dividends and selling in 1893 at 114, the stock sold down to \$20 a share and a reorganization ensued. The capitalization was cut down and the book value of plants and securities owned were marked down to agree with reasonable appraisal. General Electric learned conservatism from actual experience, and never has forgotten the lesson.

Actual cash value is not an absolute assurance of corporate value, however. The old Allis-Chalmers Manufacturing Company had over \$100 in assets for every

dollar of its securities outstanding, yet these securities became practically worthless. Great plants with magnificent machinery may be a liability if they must be preserved at a large cost for depreciation and out of borrowed capital without business existing to keep these assets employed. It is possible for a company to be found as was the Allis-Chalmers Company, land and plant, or assets, poor. This company could not pay interest on its debts because of the lack of business.

An important consideration, usually overlooked in analyzing corporation reports, is whether fire insurance is carried on the property. Not long ago the Bethlehem Steel Corporation lost about \$1,500,000 in property because of a fire at its works in South Bethlehem. This corporation could well stand the monetary loss concerned, but the loss might have greatly exceeded this amount. It was certainly a mistake in management that the corporation dropped its insurance policies September, 1915, even though it had accumulated a treasury surplus of over \$30,000,000 by that time.

A corporation such as the F. W. Woolworth Company may well carry its own insurance because, with hundreds of well separated properties, its risks are as well scattered as those of any insurance company and its fire losses will be at least as small as those of an ordinary insurance company. It can therefore save the forty per cent. of insurance premiums which would be consumed by agents' commissions, taxes, expenses and profits of insurance companies. A corporation whose plants are not so widely scattered cannot afford to carry

its own insurance. To do so is to take a long chance not consistent with conservative management.

Is there enough insurance in force? A well known credit man is quoted in a booklet issued by the National Association of Credit Men: "Of the great mass of property statements coming under my observation not one in fifty shows sufficient insurance carried."

Is the amount of insurance varied to cover changing inventories? A common practice is to strike an average between high and low seasonal inventories, inadequate when inventories are high, excessive during the dull season. Contrast with this blundering method those of such firms as Marshall Field & Co., which keep a perpetual inventory of all stocks, employ special insurance experts to cancel or add insurance daily to keep pace with fluctuations in insurable property. Armour & Co. have their insurance policies adjusted daily. In lines where stocks are not subject to such rapid changes monthly revisions of policies and amounts are found advisable.

Can there be a more important consideration than adequate fire insurance? Do you know what would be the effect of a serious fire on the securities you propose to purchase?

Industrial companies are usually particularly subject to severe loss by fire. A loss, of less importance if confined to one of several plants, may prove fatal if destroying the main building. The physical loss may be covered by fire insurance but the loss of business remains.

It is not generally known that profits may be insured. The special form of insurance is called "Use and Occupancy" and compensates for loss of the use of buildings because of fire. Such insurance is available only to corporations of the highest reputation and stability. Sears, Roebuck & Company, for example, with an enormous distributing plant in Chicago, are insured both against the physical and business losses of fire. Such insurance should be considered a splendid bulwark of strength by a prospective security holder.

The Saxon Motor Car Company recently had a serious fire. However, both property and profits were protected by insurance.

XIX

Permanent Investments

FOLLOWING the plant and property accounts come the permanent investments of industrial corporations. These may be either investments made out of surplus earnings and carried as permanent anchors to windward, or represent securities of subsidiary or affiliated companies. Such securities, of course, are not to be considered as current assets, but are classed as permanent or capital assets.

"They represent an excess of capital over and above that required by the business, and while they may be, in the majority of cases, easily convertible into cash, it is only in the event of some extraordinary circumstances or unusual demand that such proceeding takes place. They seem to be looked upon more in the nature of fixed capital and not as something which is fluctuating constantly in conformity with the volume of business."*

When the security holdings are large in proportion to the total assets, separate schedules of all the stocks and bonds owned with prices paid and dividend and interest yield should be shown. The securities must be analyzed item by item in order to determine whether or not they are worth the value as shown on the books.

* Wildman.

Many corporations have been forced into financial difficulties because of misadventures of securities shown on the books at high value. This is particularly true in the case of corporations issuing bonds to pay for stocks of another company. If the stocks fail to yield dividends the bonds issued in payment for the stocks must still pay interest; in other words, pay for a "dead horse."

It is entirely proper to maintain securities held as permanent investments at the original cost price or par value, provided, however, that reserve is set up on the credit or liability side of the balance sheet to offset any depreciation which may occur. Maintenance of any asset on the books at cost price with the reserve offsetting depreciation thereof has, as explained before, the advantage of exhibiting conditions as they originally were together with necessary adjustments.

It is not desirable that investments which have appreciated in value be marked at higher figures than cost price. Even such master minds as J. Ogden Armour, John D. Rockefeller and E. H. Harriman have made lamentable, almost ridiculous, errors in acquiring securities. A present gain may be a loss to-morrow, and safety lies in listing assets at cost or less.

Much caution must be exercised in regard to the securities of subsidiary and affiliated companies held by a parent corporation. It is not long since that the Westinghouse Electric and Manufacturing Company was obliged to write off or drastically mark down the book value of its investments in foreign electric holdings.

That its foreign plant investments had not been profitable is indicated by the fact that in the year ending March 31, 1914, over 78 per cent. of its gross income came from its domestic manufacturing business while 12 per cent. came from investments with a book value over \$2,000,000 in excess of the value at which the domestic plants were carried.

The possibilities of concealment and fraud between the books of a holding corporation and the books of a subsidiary are almost unlimited. The only satisfactory method of analysis lies in the examination of the reports of each of the subsidiary corporations, examining them as carefully as though their securities were the ones primarily under scrutiny, then analyzing with equal care the books of the parent corporation, then making an analysis of an absolute consolidation of the accounts of all the corporations, including those of the parent company.

The possibilities of misleading information are evident from the fact that the bills payable of one of the corporations included may be the bills receivable of another. It is easy to count a debt of a subsidiary corporation as a resource of the holding organization, but not to count it as a liability of the subsidiary because of the plausible reason that it is not a claim due outsiders. Again, the holding corporation may count as a resource the notes of the subsidiary payable to the holding corporation for merchandise and at the same time count as a resource such merchandise in the hands of the subsidiary. It is simple for the holding corporation to sell goods to its

subsidiary at such prices as to show a big profit for itself but at a decided loss to the subsidiary. If access then is not had to the books of the subsidiary the fallacy of the parent's prosperity may not be disclosed for several years.

Not long ago a mercantile corporation collapsed. A large number of banks, which had considered its paper gilt edged, suddenly found that notes payable to the extent of several million dollars, not shown on the books of the holding corporation or on any statement of subsidiaries given to the banks, had been issued and discounted by its subsidiaries. Books audited as suggested before and signed by reputable public accountants would not only have disclosed such an unfortunate situation, but probably would have suggested in ample time a remedy for conditions which made such futile financing seem expedient.

In 1901, before the advent of the present management and the more adequate reports now available, the United States Rubber Company owed \$1,648,694 in loans and accounts payable, an amount exceeded by quick assets. Very soon after, \$12,000,000 of bonds were issued to provide payment for the pressing obligations of subsidiary corporations.

XX

Treasury Stocks and Bonds

ONE important consideration in regard to treasury stock is to ascertain whether the amount so listed is in reality what it purports to be. Some companies include among their current assets stocks or bonds which have been authorized but never sold. This is highly improper. Treasury stocks or bonds are such in actuality only when they have been issued for value and repurchased by the company or donated to its treasury. Of course the status of the corporation would remain unchanged if the treasury stocks and bonds were cancelled and burned, simply reducing the outstanding capitalization to this extent.

However, in many instances this is not feasible. Stock issued is presumed to be disposed of at par and cannot be issued for less without a corresponding liability to its holder for the difference between what it is issued for and the par value. Treasury stock is presumed to have been issued once for par value and therefore may subsequently be sold at any price or given away if desired.* Treasury stocks or bonds would seem more logically to be carried as investments than as current assets. Is not the sale of these treasury securities practically the same as new financing?

* Wildman.

Securities held in the treasury cannot properly be set at par without an offsetting account unless the market quotation for the securities of the same issues outstanding is par or above. A proper treatment would appear to be to carry securities at par, placing on the credit or liability of the balance sheet a reserve to offset any possible inflation of value.

Treasury stocks or bonds are usually acquired through the action of a sinking fund invested each year to reduce the amount of securities, more often bonds, outstanding. For example, the American Malt Corporation recently had \$257,000 of its own bonds listed among its assets as treasury bonds.

However "treasury stock" publicly offered by a corporation has not usually been bought in previously by a company except technically. The issuance is accomplished by placing a surplus amount of the stock in the hands of the promotor or other interested person for a nominal consideration. Then as per prior agreement the stock is donated back to the company which can then legally market it to the public.

XXI

Goodwill and Organization

PHILANDER C. KNOX said something like this: "Goodwill is property capable of being appraised, bought and sold. In many cases it is the main ingredient of value. It represents all the strength, industry, tact and judgment that makes success in estimating the worth of a business. It is not infrequently reckoned more valuable than the buildings and the machinery that makes up the physical plant."

Goodwill is simply the power of attraction whereby the proprietor causes the buyer to seek him or his place of business when in the market for the kind of goods which the proprietor has for sale. The Goodwill account is then logically a capitalization of the profit resulting from business secured. Yet there are few more baffling obstructions to clear analysis of corporation reports that the Goodwill account because of its inclusion with the Plant or Property account. The intangible asset of Goodwill may arbitrarily be placed at any figure whatever. In fact such an account as "Plant, Goodwill, etc.," may be usually considered as consisting mostly if not almost entirely of the latter items. Generally a corporation having Goodwill of actual value is not at all ashamed to set it up for what it actually is. The value of the Goodwill of the firms such as Marshall Field &

Co., Steinway & Co., Victor Talking Machine Company, the General Electric Company, is enormous, yet strange to say the companies having the largest amount of bona fide Goodwill value are most apt to place its value at \$1 or to omit such an account entirely.

The creation of the Goodwill account usually occurs in the recapitalization of prosperous corporations by bankers or promoters. This was especially true in the latter part of 1911 and the early part of 1912. One of the principal reasons for this was the demand for 7 per cent. industrial preferred stocks for investment purposes to which several banking houses catered. The preferred stocks represented the entire amount of assets, while the common stock represented Goodwill or present and expected earning power. For example, when the F. W. Woolworth Company was recapitalized the real assets were about \$15,000,000. Against this was issued 7 per cent. preferred stock. The net earnings of the assets were sufficient to pay the 7 per cent. on the new \$15,000,000 of preferred stock and leave nearly 8 per cent. on the \$50,000,000 common stock which represented Goodwill. As commonly known, this Woolworth common stock has continuously earned and paid dividends, proving that the Goodwill had actual value. More often Goodwill simply represents capitalization of earnings hoped for.

Peculiar instances of the capitalization of Goodwill have occurred in mergers of corporations whose individual net earnings have been almost if not absolutely nil, this unfortunate state of affairs having been due to

slashing competition between these companies. Mergers effected by skillful and tactful promoters have supported appreciable amounts of Goodwill, necessary because the stockholders of the original companies would not release their holdings unless they received more than the physical value of the properties. Such Goodwill would have as its basis simply the value that harmony of previously opposed interests might give.

Still another origin of the Goodwill account is expense of advertising which new firms are obliged to do in order to secure their share of business. It does not seem improper that this unusual expense be charged to a Goodwill account reflecting the extra cost of establishing the business. Of course this capitalized expense, in deference to conservatism, should be distributed over the future years which should receive the benefit, being annually reduced by charges against profits.

Goodwill is usually considered an asset of diminishing value, and while examples may be given of corporations whose Goodwill value is constantly increasing, yet these same corporations will probably be found to be most industrious in wiping the Goodwill account from their books. This may be done by setting aside surplus earnings to this end. For example, the Goodwill account of the United States Realty & Improvement Company amounted at the close of 1905 to \$6,300,000. All this has been written off. The American Cotton Oil Company carries in its assets \$23,594,870 as the amount of Goodwill, Brands, etc. As a theoretical offset, the company adds year by year to its profit and loss surplus,

thus reducing the margin between the Goodwill and the surplus. In 1915 the company added \$1,427,487 to this account, making a total of \$11,958,984. The Goodwill assets exceed this surplus by about \$11,600,000.

XXII

Patents, Trademarks, Brands, Rights

THESE accounts have a familiar sound. Honestly expressed they are perfectly legitimate, but generally they represent a euphonious attempt to conceal the absence of assets of real value. In other words, they represent arbitrary amounts of goodwill or "water."

"Basic" patents are considered the most valuable, because they cover a whole process or large idea and not simply a minor detail. Very few true basic patents are obtainable at this late date. It is related that one of the most profitable patents was issued for an improved building screw, the patent simply covering a screw with a gimlet point. Previous to this screws had been flat on the end and a hole had to be drilled before insertion. The gimlet screw could be driven. It is related that the company controlling the patent prospered so that it literally scarcely knew what to do with the money. Its wagons were gold laid, the harnesses emblazoned with gold and silver, and so on.

Naturally when a patent, trademark, brand, or right is purchased by a corporation at a large but fair figure, the purchase price should be expressed in the balance sheet under its true name. No one will doubt the legitimacy of a large patent account in the books of the Gillette Razor Company. The vast assets of the American

Tobacco Company were founded on patents on cigarette machines. Who doubts the value of patents of the Mergenthaler Linotype Company or the Vulcan Detinning Company?

As is well known, the latter corporation succeeded in obtaining \$677,352 from the American Can Company because of infringement on the Vulcan Company's patented processes. Even more recently the validity of the Perlmann demountable automobile tire rim has been upheld, making possible a strongly supported corporation of \$10,000,000 capital of which the Perlmann patent is the all-important asset.

When an arbitrary value is placed upon patents it is very apt to be found that the item consists chiefly of the most intangible goodwill. A more satisfactory method is to capitalize the income reasonably representing the special income for which the patents, trademarks, brands, rights, etc., can fairly be held responsible. Suppose a company capitalized at \$1,000,000 earns as a fair average \$140,000 a year. Suppose the typical firm in the line of business in which the company is engaged—the "Representative Firm," as economists call it—brings in 7 per cent. profits on an average. If the patents, trademarks, brands, or rights are responsible for this excess earning it would not seem unreasonable to capitalize this excess at 7 per cent., or \$1,000,000. It will be remembered that this is the method used in capitalizing the goodwill of the F. W. Woolworth Company.

But patents are apt to be vain things for safety. Patents did not suffice to secure the rights to manu-

facture moving picture machines to its inventor, Mr. Edison, and after being in the courts for 37 years the suit of Thomas A. Edison against the Atlantic & Pacific Telegraph Company and the heirs of Jay Gould for the alleged infringement of telegraph patents was thrown out by the Supreme Court of the United States. Again it was only after 31 years of litigation that the American Telephone and Telegraph Company was forced to pay the Western Union Telegraph Company \$5,279,000 for the infringement of a patent. The Eastman Kodak Company waxed enormously wealthy, while the inventor of its principal product died in comparative poverty. The widow of the Reverend Hannibal Goodwin, who invented the photographic film, first received belated benefits of her husband's inventive genius at the age of 81. The litigation extended for eleven years. The patents covering photographic films in all forms, including cartridge films, film packs and moving picture films, were apparently, and after eleven years of litigation proved, valid. Yet the corporation which used the patents made such enormous strides in the 17 years of its infringement that it was able to pay the damages secured by the bona fide holders of the patents without skipping a single extra dividend.

A patent is supposed to confer on the patentee the exclusive right to make and sell the particular device described, but does not undertake to stop infringement. It is simply a permit for its owner to spend his own money in looking for people who may begin making devices similar to his and bring suit in one court after

another to stop them. As is widely known, patents are made non-effective by such simple expedients as leaving out some unimportant part mentioned in the claims or putting in something different from a part described.

Patents are usually of little value unless the holder is well able to defend them and to purchase other patents as they are issued so as to hold a controlling power in the field, thereby discouraging efforts to fight.

In July, 1910, the Allis-Chalmers Manufacturing Company won its suit on Patent No. 546,059 against the General Electric Company. Yet, while the suit was in progress, the business and credit of the smaller corporation was torn to pieces and never recovered until after drastic reorganization.

Simply because of its longer financial arm the National Cash Register Company was able to wear out weaker competitors by bringing suits against their entirely valid patents.

Patents are issued for but seventeen years and are renewable only by a special act of Congress. They are therefore essentially a wasting asset and must be written off yearly to extinction at the end of the legal period. Obviously the patents of the Vulcan Detinning Company, for example, are small in value now as compared with their value when first issued.

Yet not always do the benefits from a patent expire at the time as does its theoretical exclusive legal right. The patent right may create goodwill at least partially offsetting the expiration of the patent. Consider the goodwill created by the McCormick Harvester Company,

resulting largely from patents so enormously valuable that Congress refused to renew them. The corporation into which the McCormick Harvester Company was merged was organized without any goodwill or other intangible assets, again giving an example of conservatism which would seem, at least in comparison with the action of other companies, to show an excess of prudence.

Who can question the value of trademarks and brands such as "Royal" baking powder, "Gold Medal" flour, "Ford" automobiles? When purchased for cash such values may very properly be set up as assets. In the name of conservation careful managers will usually gradually wipe out such intangible assets by annual charges against earnings.



XXIII

Working and Trading Assets

THE items Plant and Property, Investments, Treasury Stock and Patents, Trademarks and Goodwill have already been taken up. In logical order the next account is that of Working and Trading Assets or Inventories. The Inventory items consist of such accounts as Materials and Supplies, Goods in Process, Finished Goods, Finished Parts Purchased for Assembling, Packing Material, Coal, Oil and Waste, Stationery, Advertising Matter, Postage and similar inventories.

These Working and Trading Assets are those consumed in the manufacture of the goods or the conduct of the business. In the case of a purely manufacturing corporation the assets are Working Assets. Naturally, in the case of a mercantile corporation, corresponding assets would be Trading Assets.

Quite generally, Working and Trading Assets are included among the Current Assets, which is the next item on the balance sheet. This practice does not appear to be entirely sound, because the Working and Trading Assets are not such as may be depended upon for realization at short notice without ruinous concessions from book value. This the Rumely Company found at high cost.

It is highly important to ascertain whether these Working and Trading Assets have been inventoried by professional appraisers or reliable accountants, or whether the count and valuation of the company's own employees have been taken. When the valuation is made by a reliable appraisal corporation, or by a reliable firm of public accountants, the items may be taken at book value.

As an example of the work done by reliable accounting firms, an inventory in which the writer participated may be in place. At 6 P. M., and without warning, the force of one of the largest accounting firms of Chicago took possession of a condensed milk factory near Chicago. The cash was counted immediately, then the horses, wagons and harness. The milk was inspected and measured. The same was done to the vats of condensed milk. The stock of canned goods was then counted. It was not taken for granted that the boxes in the stock department were filled with cans of condensed milk. The boxes were opened and the contents counted, an occasional can being opened and the contents examined.

If such procedure is considered necessary in the verification of assets having such comparatively little bulk value as condensed milk, the importance of checking up inventories of corporations whose finished product is higher priced articles of copper, brass or steel is quite apparent.

Not only must quantities and qualities be checked, but values of inventories must be considered. All materials and supplies should be inventoried at cost. If

the market price is lower at the time the balance sheet is made up, then a reserve to offset their decline in market value should be placed on the credit or liability side of the balance sheet. This procedure shows at once the actual cost of materials and supplies, and determines the loss if purchased at higher than present market value. A less preferable course is to place the inventories at the newer, lower market price, charging the necessary deduction as a loss to the business. The United States Rubber Company in a recent year charged off as a loss a decline in inventory value amounting to about \$1,500,000.

Inclusion in the price of inventories of material and supplies of the inward freight, cartage, etc., expended on the goods still on hand is entirely proper. Not many corporations exhibit a reserve for the depreciation of inventories in case of a decline but, in accepted practice, value inventories at cost or present market price, whichever is lower. This is not open to criticism except that the balance sheet will not then show if undue losses have been sustained through depreciation in market value.

By no means should inventories, purchased at lower than present market prices, be increased as the speculative prices advance. In 1906 copper was 26c a pound; within a few months it dropped to 11c. Companies who inventoried their copper supplies bought at, say, 16c, at the maximum price of 26c, placed themselves in a dangerous position when the price abruptly fell.

It would appear that at times of evident and exuberant prosperity and inflated prices, ample reserves might with

propriety be set up on the liability side to offset the decline in materials and supplies which will most certainly appear sooner or later, and at a time when stocks of raw materials will probably be as large as they are now.

Goods in Process valuation consists of raw material plus the labor so far expended and part of the overhead charges. Only expert appraisers are qualified to attest to such values, as they are special to each separate business.

Finished Goods valuations consist of raw material plus labor, manufacturing overhead cost, and by some it is considered wise to include the overhead charges for administration, advertising, selling, etc. The inclusion of the latter items seems questionable. Not a few large corporations carry their Finished Goods not only as high as full selling cost, but at selling price, anticipating markets and profits which may never materialize. Such procedure is entirely indefensible.

The more nearly some inventories are in the shape of raw materials, the more likely they are to liquidate at full value, because styles and fads are less apt to render raw materials unserviceable.

Another consideration in regard to inventories is sometimes of importance. Are the inventories, if booked at cost price, shown to include or exclude discounts? If the discounts are not taken off it would follow that the company poorly managed or financed would make a better showing of inventories than the one which showed them at the same cost price, with the discount eliminated.

Complications sometimes arise in the inventories of holding companies, because of profits claimed on the books of subsidiaries, which have worked upon material. Only a consolidated balance sheet with inter-company profits eliminated would clearly demonstrate the true status.



XXIV

Current Assets

CURRENT Assets, popularly called Quick Assets, are supposed to include only such as will soon become available in cash for the purpose of meeting debts which become due in equally short time.

Every item of Current Assets is open to question until absolutely verified. Even the Cash may include "Cash Items"; in other words, I. O. U.'s of doubtful value. The Accounts and Notes Receivable may not be worth their face value by any means. In fact, nearly all corporations ought to set aside a reserve on the credit or liability side of the balance sheet as a "Reserve for Bad Debts." Of course the cash should be separated from the Notes and from the Accounts Receivable, though all three are lumped in more balance sheets than one.

In most corporations the Accounts Receivable are more liquid and certain than are the Notes Receivable, because a debt usually becomes a Note Receivable only when it becomes overdue as an account. Naturally an overdue obligation is normally not as good as one of current standing. Here, as elsewhere, principles should not be laid with too much assumption. In the agricultural implement business, for instance, Notes Receivable are normally very large in amount because notes are taken from agents and from farmers in payment for im-

plements as a regular policy. In other lines, conducted on a cash basis, for example, the 5 and 10c stores, neither Accounts nor Notes Receivable are a factor.

Drafts and Notes Receivable usually draw interest from date of making. As probably a large number of these drafts and notes have been running for some time, though the principal is not due at the time of making up the balance sheet, a considerable amount of interest has accrued to the benefit of the corporation. This is styled Accrued Interest on Drafts and Notes Receivable. Many corporations do not separate the interest, but combine principal and accrued interest as Drafts and Notes Receivable and Interest.

Bonds owned as Investments or in the Current Assets may pay interest at different times. If any interest is accrued but not paid at Balance Sheet time, the account is naturally labeled Accrued Interest on Bonds Owned.

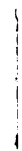
Dividends on stocks owned are not legally considered as an asset until they are declared by the board of directors. As soon as declared they are a legal liability of the corporation intending to pay them. As soon as dividends are declared on stocks owned they become Current Assets.

In the case of a holding company only a consolidated balance sheet with inter-company Current Liabilities and Current Assets eliminated can make the actual truth known, as has been stated before. Suppose the parent company needs cash and a subsidiary gives a note which the parent discounts at the bank. This is not an un-

questionable form of Quick Asset, yet it may appear very plausible on the books of the holding company. On the other hand, a subsidiary company may be in difficulties, and the parent advances the funds needed, taking in return the subsidiary's notes. The subsidiary may or may not be able to pay them back.

An important account among the Current Assets of many corporations is Securities. Securities purchased for permanent investment should, as before stated, be placed among the Capital Assets. Only those should be considered as Current Assets which have been acquired with funds not needed in the regular conduct of business—securities purchased to keep idle funds producing returns.

Of course a schedule of these securities should be shown, and the basis of valuation given. They should be highly marketable, as their inclusion in Current Assets would admit no slow market securities. The preferred method of valuation would be at cost price, with a reserve on the credit or liability side of the ledger to provide for depreciation in value, if any, since purchase. This method would make possible easy analysis as to the profit or loss on the purchase. A large number of corporations which have recently been phenomenally successful because of "war orders" have placed part of their profits in securities, bought at present high prices, and listed among Current Assets. These securities will need scrutiny in the future, when the financial and business outlook may not be so bright as it is at present.



XXV

Sinking Funds

SINKING Funds are accumulations of capital set aside in order to meet obligations maturing in the future. Such obligations often have indentures providing that certain amounts be set aside annually, which at compound interest will equal the maturing debt. These amounts may be set aside in cash and be placed in the company's treasury, or preferably, in the hands of the trustees of the bonds; usually a trust company. The Sinking Fund may be invested in securities, selected by officials of the corporation, or by the trustee, if the indenture so provides.

A Sinking Fund in cash accumulating in a corporation's treasury for a number of years is oftentimes liable to prove a source of temptation to the officials. It is supposedly set aside in order to take care of one particular debt. If kept at the disposal of the company during all the years intervening between the first payment into the Sinking Fund and the maturity of the debt, more than one time of stringency, more than one time of unusual apparent speculative possibility will appear, when the cash in the Sinking Fund may prove too great a temptation and its use changed from its intended purpose. This has been experienced in countless cases, tak-

ing a charitable view as to the disappearance of the Sinking Fund.

A better method is that the indenture of the bond provide that the Sinking Fund payments be made to a trust company as trustee, which shall each year use the Sinking Fund cash paid in to purchase bonds in the open market, reducing by this much annually the amount of debt outstanding of the corporation. These bonds may then be destroyed. Sometimes the purchased bonds are "kept alive" in the company's treasury and interest paid on them. Nothing is gained by this procedure, unless the accruing interest is added to the fund, and the danger of possible conversion is an argument against this practice.

In any event the Sinking Fund should represent cash, or securities purchased with the cash. If in cash, its location and guardianship should be known. If represented by securities, a schedule of the Sinking Fund assets should be presented, with purchase and present market price.

The United States Steel Corporation had retired at the end of 1915 some \$91,655,000 of bonds through its Sinking Fund operations.

These bonds are held alive in the Sinking Fund and the interest on them applied to the redemption of additional bonds. In 1915 this accruing interest amounted to \$4,353,338, as compared with the fixed annual Sinking Fund payments from earnings of \$5,396,260. Thus a steadily increasing amount of bonds is redeemed each year. For instance, the annual Sinking Fund charge for

the first collateral 5s is \$3,040,000, while \$4,741,000 of those bonds were redeemed in 1915

It has become common practice for corporations to establish Insurance Funds for the protection of their property against fire and other dangers. The economies of dispensing with regular fire insurance has already been discussed. When established, the Insurance Fund should be in cash or in marketable securities. If in the latter a schedule of their content should be shown.

Pension Funds are funds set aside to provide pensions for employees who have grown old in the service. Increasing numbers of corporations are taking up such action both from an altruistic and from a hard business point of view. As with all other funds, the amount should be in cash or in marketable securities.

Insurance and Pension Funds are not to be considered free assets of the business. They are counter-balanced, in fact, if not on the books, by a probable loss in the case of the Insurance Fund and by a certain future liability in the case of the Pension Fund.



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XXVI

Deferred Assets

DEFERRED Assets, sometimes called Deferred Charges to Expense, are neither quick nor capital assets. In fact, part of them are largely "assets by courtesy." Deferred Assets include prepaid expense charges. Insurance expenses, for example, are normally paid by the year. Suppose the annual premium, \$5,000, is paid June 1 and the balance sheet is made up December 31. Obviously, insurance is paid for till the following June, and the entire \$5,000 should by no means be charged to expense by December 31. The proper way would be to set up an account, which is considered an asset account, Insurance Paid in Advance. Then each month a twelfth part of this insurance premium payment is charged up to expense: Insurance. On December 31, half of the \$5,000 would properly be charged to the expense Insurance account and half be left to be charged off in the coming six months. The \$2,500 remaining in the Insurance Paid in Advance account would be placed in the balance sheet as a Deferred Asset. Of course, in case of forced liquidation on December 31, not all of this \$2,500 would be refunded by the insurance company, which would prune the amount, because the rate for six months is higher than for the full-year period. Yet the balance sheet as a whole is considered to represent "go-

ing concern" values, and Insurance Paid in Advance is surely to be valued at regular period rates. Rent Paid in Advance and Taxes Paid in Advance are other similar accounts which are assets to the extent that they are prepaid at the time the balance sheet is made up, by the same reasoning as applies to Insurance Paid in Advance.

The benefits of Organization Expense, at least theoretically, extend over a number of years. This seems to be as logical as that the expense of building superintendence is rightfully included in cost and therefore in the asset Plant and Buildings after the plant of a corporation is constructed. Therefore it is common practice to create an account Organization Expense at the time of the beginning of the career of a new corporation. This is normally decreased each year by writing off part of the amount to Profit and Loss. At the end of ten years the account is usually entirely written off. Its convertibility as an asset may in instances be open to argument, but in case of large Organization Expense there seems to be no reason why this expense should be entirely charged to Profit and Loss the first year.

Theoretically, moving a plant from one place to another more economically fitted to the corporation's purposes may constitute an expense of sufficient resulting benefit to the company to be called a Deferred Asset account Moving Expenses, and to be written off from Profit and Loss only over a number of years. Usually this practice is frowned upon. It is well to know that such accounts are frequently found to be the foundation of the account in the balance sheet Deferred Charges

to Expense, especially when no schedule is given to support the balance sheet account.

The 1914 annual report of the Loose-Wiles Biscuit Company exhibited an account "Deferred Charges to Future Operations" amounting to \$391,292. The account is explained to include "prepaid insurance, interest, etc., balance of special publicity expenses, and the net operating outlay incidental to the initial operation of the New York bakery."

It is not orthodox to treat any operating expenses as assets. These "assets" may or may not have been a very large part of the \$391,292. The accountants who certified to the report sidestepped responsibility by stating that the Deferred Charges to Future Operations represented outlays which, in the opinion of the directors, were reasonably and properly chargeable against future profits. By the end of 1915 the company had reduced the Deferred Charges to \$259,759.

In taking over properties legal expenses may be incurred in large amount. The benefits of this expense may fairly apply over a series of years. Where so handled, a Legal Expense Deferred account is established, which is written off to Profit and Loss from year to year.

The unusual expense of Advertising necessary to new firms in some lines of business is sometimes included in the Goodwill account. Other firms create a separate account, as a Deferred Asset, charging off to Profit and Loss a goodly proportion of the amount each year.

Advances to Subsidiaries as loans for expansion or for

paying interest before earnings are developed is a common account which should be placed among the Deferred Assets, and not among the Current Assets. Whether the asset will be deferred permanently will depend upon the future of the subsidiary. If the amount is large, further investigation is indicated.

Discount on Bonds is an account arising from the sale of a corporation's bonds at a discount from par. Suppose \$1,000,000 twenty-year 5% bonds are sold at 92. Obviously the proceeds would be \$920,000, while full \$1,000,000 must be paid at maturity. If the entire \$80,000 discount is charged to Profit and Loss the first year, the annual report will show a material loss, not entirely justified by facts, because probably the company could have sold twenty-year 6% bonds at par, involving no discount. It is quite proper, then, to set up the \$80,000 Discount on Bonds as a Deferred Asset, writing off the account during the period the bonds run—twenty years. Unfortunately many corporations have added the discount on bonds to the Plant or Land and Building account. The fact that this has been common practice is simply another short reason for skepticism regarding accounts that are not fully itemized and verified.

Discount on Capital Stock, arising from the sale of stock at a discount from par. This discount is usually carried as Goodwill, though it would seem better practice to set it up as a special account among the "assets by courtesy."

PART V
BALANCE SHEET—CREDIT



XXVII

Bond Limitation

THE conventional balance sheet, as exemplified by the form given on page 77 shows the capital stock at the head of the credit side of the balance sheet. For the present, capital stock will be ignored in favor of funded liabilities because of convenience in discussing the form of capitalization.

Every one of the first large industrial corporations was forced by competitive conditions. Owners of many plants afterwards merged were overjoyed at an opportunity to turn in their properties at inflated figures, secure cash and prior lien securities in a newly promoted corporation, and retire to quiet life. Those were the halcyon days of careless finance. Bonds were issued not only for property absorbed but even for promoters' profits, making a fixed charge of the expected economies of large scale productions—and watered bonds. Unwieldy financial structures such as the National Cordage Company, the National Asphalt Company and the United States Shipbuilding Company collapsed. The present generation of security purchasers may analyze the cause of the decline and fall of the great corporations which have gone before, and easily trace the path which leads away from safety.

In the first epidemic of consolidation, corporations were capitalized on the basis of expected earnings in the years of greatest prosperity. A corporation may exist indefinitely if its capitalization be represented in common stock, because returns are not obligatory, but ordinary bond charges are absolute. A deviation from expected returns of operation because of the depression period of the cycles in which general business labors and a collapse occurs. This seems so elementary as to need no proof, yet hundreds of millions of dollars have been sacrificed by investors because they had not learned this simple truth. The careful investor may learn it for himself, never to forget, if he will, and at the expense of other people's fortune breaking experience.

Take for example the Allis-Chalmers Company. It struggled along for years under the burden of a fixed charge on \$11,148,000 bonds which, besides interest, carried a sinking fund requirement and finally succumbed. Having changed the form of its capitalization so that it is able to conserve its earnings, it is now on the path to prosperity.

Most large corporations now doing business without direct court management are capitalized on more conservative lines than most of those organized during the first period of consolidation. Some of them were created differently. Others, such as the Maxwell Motor Company, have had their present form thrust upon them by voluntary or involuntary reorganization.

To be sure, many of the best industrial corporations have issues of bonds. As a rule, however, a large bond

issue is a caution sign. The United States Steel Corporation always has had large issues of bonds, and at present the corporation's financial strength seems assured—but for many years the future was a grave question.

If a business is one of comparatively steady income, bonds may be, as a medical practitioner says, "indicated." Normally a prior lien on the earnings and assets, they carry less risk to the security holder and consequently less income than other forms of capitalization. Bonds enable the common-stock holder to "trade on the equity"—using at a profit borrowed funds.

Suppose a business has \$500,000 1st mortgage 5% bonds and \$100,000 common stock. Now, suppose the earnings on the \$600,000 invested are 8%. Paying \$25,000 required for interest on the \$500,000 bonds would leave \$23,000, or 23% on the \$100,000 capital stock, instead of the 8% which would have been shown without the more easily satisfied bonds.

Yet the advantage may be more apparent than real. Bondholders, to be lightly dismissed in times of prosperity, hold the fearsome "mortgage on the farm" when times of adversity come. Were the net income to drop from \$48,000 to \$25,000 the bondholders' requirements would be but barely met, and any decline from \$25,000 would be a serious matter unless the corporation was well fortified with cash. Large bond issues have therefore proved the undoing of more than one promising industrial. Perhaps the most obvious lesson of the past two decades of corporation finance and the one

learned at the highest cost is that as far as solvency is concerned an industrial corporation depends upon the form of its capitalization and not its amount. Stockholders, even cumulative preferred stockholders, may be pacified, or grimly told to wait until strength of treasury justifies capital return. Bondholders will not wait. They demand their pound of flesh and become the source of control in case of reorganization.

An industrial corporation cannot soundly be financed like a railroad by enlisting new borrowed capital for a very large part of extensions. It must pay for its new plants and improvements largely out of earnings, and must supply itself with funds in the same way in order to place its securities upon a sound basis. This is true because a large part of its so-called permanent assets have little permanent value, whereas those of a railroad do have permanent value. The values in industrial plants are not permanent, partly because the plants themselves must so rapidly and continually be improved in order to cater to the changing demands, as iron and steel consumers for example; and partly because these plants, if the owning company ever becomes insolvent, are often but little more than junk. On the contrary, a piece of railroad property sold under the hammer will bring almost all it actually cost. The business of a railroad may rise or fall with the times, but it can never wholly vanish, whereas the business of an industrial concern can and often does vanish, as, for instance, a number of once flourishing automobile companies. It is because of these differences that thoroughly sound industrial companies should conserve their earnings and borrow sparingly.

Times of prosperity such as 1915 and 1916, most promising in outlook, prove times of temptation to corporation managers. Now only the silver linings of the clouds are seen, and the future promises unlimited numbers of fat, juicy orders. New plants are planned, new equipment ordered, and all at prices which would seem exorbitant in ordinary times. Perfectly proper proceedings, these, if orders accepted on an abnormal price basis will assuredly prove so remunerative that the profits pay for the expansion. To plan extensions on borrowed money to accommodate business risen beyond the limits of reason, at exorbitant prices of labor and material, appears to be a questionable policy.

Cycles, in business and finance, still run their course, and the depression certain to follow a "fool's paradise" may prove drastic and drawn out. The dollars should be kept in reserve, ready for service on the firing line, instead of being dissipated in large dividends or tied up in plant assets which are not only unused, but a financial burden in times less prosperous.

In the public utility field, telephone and power corporations are, as classes, particularly luminous examples of corporations luxuriating in even-keeled progress of earnings and profits. Telephone and power corporations may issue bonds drawing on earnings to a larger extent than can a corporation engaged, for example, in erecting office and hotel buildings. To be of any security to investors and to avoid a painful resemblance to the biblical action of a millstone, the bond issue of any corporation should be supported by sustained earnings,

proving for several consecutive years a liberal amount over interest requirements.

The customary business depression cuts off about 50% of the average industrial corporation income available for return on bonds and stocks. Funded debt must therefore be carefully limited to the proved possibilities of earnings. Net earnings for the past five years, including the present, should be at least double the total interest charges. If, then, the net earnings have been \$210,000, \$201,000, \$150,000, \$215,000, \$300,000, bond interest would amount to but \$75,000, half the net earnings of the least prosperous year. At 5%, \$75,000 would pay interest on \$1,500,000, quite enough interest-bearing debt, it would seem, for an industrial with net earnings ranging from \$150,000 to \$300,000. Such limitation would add greatly to credit. Further capital requirements could well be met from profits and increase in capital stock.

That the obvious advantage of trading on the equity, i. e., benefiting through the use of capital borrowed at comparatively low rates, is not always essential is proven by the success of corporations such as most of the Standard Oil companies and the Ford Motor Company, which do not have even preferred stock. These have financed themselves out of earnings and have attained apparently unassailable financial strength.

The Singer Sewing Machine Company also has a simple system of finance—\$60,000,000 in common stock. The Mergenthaler Linotype Company has \$12,786,700

common stock, no preferred stock, no bonds. Such organizations are of "safety first" character. The common stock has as its equity the total valuation of the property, less floating debt.

Most of the corporations recently organized or re-capitalized have been promoted without bonds. Examples are the Kresge and McCrory 5 and 10 cent stores. The Saxon Motor Car Company has recently been organized on a basis of common stock only, as has the Spicer Manufacturing Company and several others.

A common form of capitalization is with common stock of no par value. For example, the Lee Rubber and Tire Company has 150,000 such shares. Besides legal advantages in meeting taxation laws such stocks avoid even the appearance of coincidence of par with physical or book valuation and so help focus attention to the company's tangible and earning values.

As illustrating the recognized necessity to curb unwieldy industrial issues the bond provisions of Armour & Company and of the National Enameling & Stamping Company are interesting. The strength of the General Electric bonds is also notable.

Armour & Company have outstanding \$50,000,000 real estate first mortgage $4\frac{1}{2}$ per cent. bonds. The mortgage provides that the unincumbered quick assets of the company and its auxiliary companies shall at all times exceed the aggregate debt of the company and auxiliary companies, including the outstanding bonds of this issue.

The National Enameling and Stamping Company has authorized and outstanding \$3,500,000 refunding first

mortgage real estate sinking fund 5's which provide that the liquid assets of the company must at all times equal the aggregate debts of the company, including outstanding bonds of this issue.

The General Electric Company has authorized \$60,000,000 of 5 per cent. debenture (unsecured) bonds. During the fourteen years to 1916, earnings for the stock were never less than \$4,802,252, the figure for 1910. This year of lowest earnings showed over 1 and $\frac{1}{2}$ times the interest requirements of all these bonds *authorized*. During the past five years no year has shown total *authorized* bond interest earned less than three times. Moreover, only \$10,000,000 of the bonds have been *issued*. The stock of the General Electric Company amounts to \$101,485,700, which at a fair average price of as low as \$150 per share provides an equity back of its debts of over \$150,000,000. The company has only \$2,067,000 other bonds outstanding.

As funded debt is usually considered all indebtedness maturing in more than a year, included therefore with bonds are short-term bonds or notes. Obligations coming due within five years are usually called notes, no matter whether secured or unsecured.

Short-term obligations are issued most often either to bridge a financial requirement considered only temporary, or to avoid the ruinous sacrifice in marketing long-term securities in an unwilling bond market. The corporation issuing short-term notes, which command fair prices at nearly all times, aims to secure permanent funds by replacing these obligations with longer-term

maturities upon the appearance of favorable financial markets.

Much acumen, or what is sometimes just as effective, much good fortune, must attend the refunding of short-term obligations. This is also true of long-term bonds presently maturing. Bonds issued in 1898, coming due in 1918, will require payment or refunding in 1918 just as truly as notes issued in 1916 and due two years hence. In fact, it is suggested that corporations place all funded maturities of less than five years in a separate category as now being short-term obligations, no matter when issued.

If the short-term obligations are paid off at maturity, well and good. If they are refunded prior to or at this date to advantage in a rising, confident bond market, it is a transaction reflecting credit on the financial management. But not all short-term obligations are either paid at maturity or positively provided with refunding arrangements. Every little while—parts of 1907 and 1908 and of 1914, for example—credit in large quantities becomes most difficult to secure, and refunding of obligations almost impossible. The presence of a large amount of obligations maturing within a year or two may prove a millstone. This was true of the notes of the highly prosperous Westinghouse Electric and Manufacturing Company in 1907-1908.

Financial stringency follows a plethora of loanable funds as surely as night follows the day, and stringency is normally soon accompanied by decided declines in corporation incomes conspiring against the refunding of obligations.

The United States Rubber Company had at the end of 1915 nearly \$32,000,000 funded securities of long term and note issues maturing by the first day of December, 1918, besides \$19,939,709 loans and notes payable, which included a large amount of borrowing which required reduction. This was officially recognized, in spite of large receivables on the other side of the balance sheet. The company is prospering, is in strong hands, and is conserving profits. Many stockholders will sleep easier now that a new financing plan has been safely underwritten.

A comparison of balance sheets before and after a bond or note issue is placed with investors usually shows how the funds have been used, though the information is usually indicated in the "remarks" of the annual reports. To take a simple example: suppose a company has a note issue of \$10,000,000 maturing in 1915. Just before maturity the company sold a bond issue of \$20,000,000. The annual report for the year 1915 would show no \$10,000,000 note issue; instead there are \$20,000,000 bonds among the liabilities, bills payable have decreased by \$5,000,000 and cash increased \$6,000,000. It would be evident that the new funds had been used to refund the note issue, to reduce the payables and to increase the cash. The \$1,000,000 cash unaccounted for would probably prove to come from earnings saved from the year's business.

XXVIII

Preferred and Common Stocks

AFTER a series of disasters to corporations having outstanding unwieldy funded indebtedness, promotions were made by the flotation of cumulative preferred stock and common stock, without bonds. In theory the preferred stock was issued to the value of the property. In certain cases cumulative preferred stock was issued for more than the value of the assets—watered preferred stock. To issue cumulative preferred stock to the value of the property usually invited reckless action. Few corporations can expect, until fortified by many years of economy and business expansion, to be able consistently to earn even 6 or 7 per cent. on the value of the property. Depressions in this country are sharp.

Several of the largest corporations have gone into receivership because of paying unearned dividends on the cumulative preferred stock. To be sure, cumulative preferred stock dividends are not arbitrary charges. They *need* not be paid. However, corporations are managed for the benefit of common-stock holders. One of the human failings has been, especially in past years, to value stocks by dividends rather than by earnings. At the time of organization promoters and underwriters usually receive common stock for their efforts. To make a mar-

ket to obtain the desideratum, cash, in exchange for common stock, unwarranted dividends were declared on preferred stock in order to give promise of dividends on the common.

Cumulative preferred stocks are often, like most compromises, necessary evils. Corporations not unusually prosperous issue cumulative preferred stock not only because such stock may be sold to the public and the common-stock holders can "trade on the equity," but because the investing public demands assurance that dividends on the preferred stock shall not lapse indefinitely to the ultimate benefit of the common-stock holders. History shows that in far too many cases both preferred-stock holders and common-stock holders have suffered deplorably. It would seem better to allow dividends on cumulative preferred stock to accumulate until the corporation could well afford to take care of them than to declare the dividend at the expense of all concerned.

The directors of the Colorado Fuel & Iron Company declared dividends of 60% in 1916 on the \$2,000,000 8% cumulative preferred stock, taking care of dividends previously omitted. Years before the company could have paid in full the comparatively small amount involved in squaring up the dividend requirement, but little criticism is levelled at the management for its conservatism.

Stock certificates should be as carefully examined as deeds. Every word may be essential. The preferred stock should be preferred as to earnings and in case of dissolution as to distribution of assets. If the dividends

are not cumulative, i. e., payable in full from date of issuance to present date at the rate specified before any dividend may be declared on the common, the holder should know it. If any of the preferred dividends due in the past have not been paid, the possibility of payment is, perhaps, the most important consideration in regard to the purchase of the stock.

A large number of preferred stocks are redeemable at a certain price, say 105 or 115, and some preferred stocks hang around the redeemable figure. The limitations of possibilities for a long, profitable investment in such stocks are evident. On the other hand, substantial profits have come to purchasers at a lower figure through redemption at the callable price.

Some preferred stocks participate in all profits with the common by the terms of the certificate, and unless the return on the preferred is specifically limited the preferred stock shares equally with the common after the preferred dividend is paid in full.

Many of the corporations having preferred stock are retiring it either as a matter of expediency or because of a provision entered into. The Woolworth, Kresge and McCrory Corporations have pledged themselves to issue no bonds nor to increase the preferred stock without consent of 2/3 of both common and preferred stock. Moreover, a certain amount is set aside by each of these corporations for the redemption of preferred stock up to a certain stipulated market price. The Woolworth Company retired \$1,500,000 of preferred stock in 1914 and 1915.

The Willys-Overland Company has authorized \$10,000,000 7% non-convertible stock, but has none outstanding. It has \$15,000,000 7% cumulative preferred stock convertible for five years beginning January 1, 1917, into common stock at \$300, or at the rate of three dollars of preferred stock for one of common. Since the par value per share of the common stock has been changed to \$25 a share, three shares of preferred are exchangeable for four shares of common. If all the preferred is exchanged for common stock the stock capitalization will be reduced by \$10,000,000, as \$5,000,000 common stock would displace \$15,000,000 of preferred stock. However, no matter how high the common stock sells, the preferred may not go far above 110; the preferred stock can be called in at 110.

The Springfield Body Corporation has recently issued 8% cumulative preferred stock, participating with the common after 4% dividends have been paid on the common. The preferred is redeemable at \$200 a share.

Following are the principal provisions of the preferred stock of an industrial corporation recently recapitalized:

I.—The preferred stock shall not be increased without the consent of the holders of at least two-thirds of the preferred and two-thirds of the common stock then outstanding.

II.—No mortgage lien or encumbrance of any kind on any of the real or personal property, assets, effects or goodwill shall be created, be valid or effective unless the same shall have been previously authorized by the consent of at least two-thirds of each class of the outstanding preferred and common stocks. This shall not in any way prevent the giving of purchase money mortgages or purchase money liens on property real or personal hereafter acquired by the new corporation.

III.—Dividends are cumulative, payable 7% per annum quarterly the first days of January, April, July and October.

IV.—In case of liquidation, dissolution or the winding up of affairs and distribution of assets, holders of the preferred stock shall be entitled to be paid in full at 120% and accrued dividends on the par value of the shares.

V.—At least 20% of the surplus net profits of each year, after the payment of preferred dividends, shall be used to acquire and cancel at not more than 120 and accrued dividends the outstanding preferred stock.

VI.—The preferred stock is callable in whole or in part after January 1, 1917, on any quarterly dividend date, at the option of the corporation, at 120 and accrued dividends upon 90 days' notice to registered holders.

VII.—Annual audit by certified public accountants nominated by the bankers as long as there is any preferred stock outstanding, and directors are to be named by the underwriters of the preferred stock as long as any preferred stock remains outstanding.

VIII.—No dividends payable on the common stock of the company until a surplus of \$70,000 from the net earnings over and above 20% sinking fund for the purchase and redemption of the preferred shares shall have been created and maintained.

IX.—The preferred stock shall not be entitled to vote except on a proposition to increase the amount of preferred stock or to mortgage or encumber the company's property, unless the new company shall pass two successive quarterly dividends. Then the preferred stock shall have an equal voting right share for share with the common stock; and if four successive quarterly dividends are passed then the preferred stock shall have the entire voting right and the common stock shall be deprived of its voting right until all of the dividends which may then have accumulated shall have been paid in full.



XXIX

Changing Capitalization Form

IF a large bond issue causes a mandatory drain upon a company's funds—a drain which may prove burdensome—it follows that the replacement of bonds by common stock at a fair exchange ratio is a measure making for strength. Necessary payments are turned into optional distributions.

Take, for example, the United Fruit Company. On September 30, 1915, the company had \$36,619,000 stock and \$33,359,000 bonds, a ratio of bonds to stock of 91%. Now, United Fruit stock has continuously sold above par. The company issued in 1916 \$12,198,100 stock at \$120 per share. With this accomplished and the proceeds largely used for retiring short-term bonds, the ratio of funded indebtedness to stock fell to 43%. This change in form of capitalization will decrease the earnings of the entire stock, because the funded debt retired required 6%, while the stock returns 8%, but much more than par was received for the new stock, and earnings are so large that increased strength of financial structure will not deprive the stockholders of the regular return. By subscribing to the new capital stock at 120 while the stock was selling much higher in the open market, the privileged stockholders partook in a procedure immediately profitable to them.

The \$8,000,000 long-term issues of the United Fruit Company are steadily being retired by sinking-fund provision and will be extinguished thereby before maturity in 1923.

Now, it would not avail the corporation to have converted its short-term bonds into stock if the stock already outstanding had not sold well above par. A sudden increase in capital stock would have painfully depressed the market and be marketed only at ruinous concessions from even the price ruling before the increase. The sale of the stock, say at 60, would result in indefinitely postponing any adequate return on the entire amount of stock.

With stock selling well above par and earnings good, the moderate increase in stock coincident with the retirement of funded debt materially stabilizes the corporation finances without any material loss to stockholders.

A favored method designed to increase the proportion of stock to bonds as well as to attract needed capital is the issuance of convertible bonds. Suppose a company's common stock sells at 75. A large sudden increase in the amount would be disastrous. Yet the company might be able to sell an issue of bonds convertible into the common stock at par. A holder of a \$1,000 bond could exchange it for ten shares or \$1,000 par value.

Convertible bonds have been said to be the securities a man buys after he promises his wife not to speculate in stocks. The convertible bond, whether secured by mortgage, or, as a debenture, only by the general credit of the company, holds its price as a bond, and may

enjoy a splendid increase in value if the stock advances above the conversion figure.

Suppose a convertible 5% debenture bond is purchased at 90, or \$900 for a \$1,000 bond, is convertible into stock at par, and the stock advances from 75 to 130. The price of the bond will keep company with that of the stock, because as soon as the stock is over 90, a bondholder can profit by exchanging the bonds for stock at any time. Exchanging an original value of \$900 for the stock at 130 would profit the bondholder \$400. The company's strength is increased by conversion because interest charges are reduced.

The purchaser of convertible bonds should carefully read the text of his security, however. He may find that the attractive convertibility feature is qualified by an option of the company to retire it at a limited figure. For example, the American Agricultural Chemical Company has an issue of 5% debenture bonds convertible into common stock at any time until the bonds mature in 1929. The common stock is active and may sell well above par but the bonds are redeemable as a whole at 101.



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XXX

Current Liabilities

CURRENT Liabilities include those unfunded corporate obligations which will soon be payable. Arbitrarily, therefore, a bond or note issue maturing in three months is not a Current Liability because funded, while a bank loan payable in six months is considered very much a Current Liability.

In the list of Current Liabilities given in the balance sheet page 77 are: Taxes Accrued, Payroll Accrued, Accounts Payable, Notes and Drafts Payable, Expenses Accrued, Interest Accrued on Notes and Drafts Payable, Dividends Payable, Interest Accrued on First Mortgage Bonds and Interest Accrued on Five-Year Notes. Six of the nine items are accruals.

The balance sheet of the "Montville Manufacturing Company," from which the list of Current Liabilities was taken, is dated December 31, 1916. A corporation is not able to keep its expenses paid up to date. Take interest on bonds, for example. As of December 31st, interest on First Mortgage 5% Bonds, paid October 1st, is not due again till April 1st. Yet the liability mounts every day from October 1st, and on December 31st amounts to $1\frac{1}{4}\%$, which is a Current Liability as much as a note due in three months.

Certain taxes, not payable till some months later,

apply to the period dating from September 1st, so $\frac{1}{3}$ of these taxes, not due and unpaid, but mounting up, must be shown as a Current Liability on December 31.

Notes and drafts payable, which were made out some little time ago, but with interest payable only upon maturity, have created a Current Liability to the extent that the interest figures up to December 31st.

Again, December 31, 1915, was Sunday. Wages are usually paid Saturday, so no wages would normally remain unpaid December 31st. Other years, ending say Wednesday or Thursday would show a debt which is, next to taxes, the most inflexible liability extant. Salaries of officers, salesmen, etc., usually payable monthly, will have been paid on December 31st and will not appear on the balance sheet. Petty items, such as unrendered and unpaid telephone, electric light and garage bills, make up the item Expenses Accrued. Corporation accountants use the data they have and common sense, later adjusting the books to actualities, but at best the balance sheet is a painting, not an exact photograph of a corporation's financial condition.

Some corporations show all accrued items under a special head of Accrued Liabilities. Unless this head is included in Current Liabilities, the separation of part of the actual Current Liabilities may lead the unwary astray.

Accounts and Bills Payable must by all means be separated. Accounts Payable are amounts due for supplies, materials, goods, etc., and may vary considerably in amount, being small or large according to the sea-

sonal requirements of the business at the date when the balance sheet is taken off the books. Bills, Notes and Drafts Payable may be quite different in origin and effect. Bills and Notes Payable are terms used interchangeably and Bills Payable, when separately stated, often includes Drafts Payable.

Notes Payable and Drafts Payable accepted for payment at maturity are issued to cover current supply or merchandise accounts past due, or to raise funds for any number of purposes, including that of taking advantage of any cash discounts offered. Most industrial enterprises are of a seasonal nature. Take the canning industry, for example, with the necessary expenditures concentrating in the summer. Cannerys naturally arrange for credits, giving notes payable in return, which are paid upon sale of the cannery output.

Wholesalers and manufacturers quite generally finance themselves with notes payable, which, as 30, 60 or 90-day commercial paper, form a commodity in the financial world. A difficulty has been that corporations have been known to sell more commercial paper (Notes Payable) than the buyers were aware of. Maturing commercial paper has been paid from the proceeds of still more paper sold, with the total amount gradually increasing. The facts would appear only in a time of stress, when commercial paper would become unsalable. Of course, such secret inflation of credit would not appear on the balance sheet.

The prevention of such an unfortunate condition is to be found principally in exhaustive audits by reliable

public accountants, and, second, by the requirement of banks and other purchasers that all commercial paper offered be registered with a trust company, so that the total amount outstanding be as easily ascertainable as the amount of bonds or stocks outstanding. The prospective investor in the stocks or bonds of a corporation financing itself in any measure with commercial paper should satisfy himself that the notes are duly registered. The Endicott, Johnson Shoe Company is an example of corporations which have taken the advanced step of registering their paper. Such action redounds to the credit of the corporation as well as to the protection of banks and investors.

Contingent Liabilities is an account which should appear at the bottom of many balance sheets where it is not now to be found. Since, as the account implies, the liability may or may not be absolute, the account should not be placed in the balance sheet, but as a footnote under the balance sheet. Corporations often sign "accommodation paper" just as do individuals. Usually this paper is made by a subsidiary or affiliated corporation, but the contingent liability exists just the same. Often a corporation guarantees the principal or interest or both of a subsidiary's bonds or guarantees the payment of dividends on the stocks of a subsidiary or affiliated company. At the time of execution, of course, the liability is mostly nominal, but the future is always uncertain and contingent liability may become a most immediate and proximate one. Therefore, any contingent liability should be known to the prospective partner in a corporate

enterprise just as logically as should an individual's contingent liabilities be known to anyone who is about to enter into partnership with him.

In 1913, when the assets of the International Harvester Company were divided, part going to the International Harvester Corporation, the original company was not relieved of liability on \$15,000,000 loans transferred to the "Corporation," which is the export and foreign end. The \$15,000,000 remained as a Contingent Liability of the domestic company. The amount was reduced a third in 1914, but the possibility of importance of such a liability is evident.



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XXXI

Working Capital

WORKING Capital is the net, free, quick assets of a corporation. It will not be specified on the balance sheet, but is easily found by subtracting the current liabilities from the current assets.

The amount of Working Capital is of extreme importance to most industrial corporations. They need large amounts of free capital, quite different from the needs of public-utility companies, which do a steady cash business. The Working Capital necessary depends largely upon the character of the business.

A chain-store corporation, being on a cash basis, should require little credit itself. The F. W. Woolworth Company had, for example, on December 31, 1915, liabilities of but \$344,646, and current assets of \$4,366,448, showing a net Working Capital of \$4,021,802. This compares with a Working Capital of \$2,886,753 in 1909, and without a proportionate increase in the volume of sales. These figures carefully exclude the inventories, \$11,062,314 in 1915, and \$8,628,841 in 1909, as inventories are considered Working and Trading Assets rather than Current Assets.

The United States Steel Corporation, whose business is decidedly subject to fluctuations, with business less than ten times that of the Woolworth Company, in 1915

carried a net Working Capital (excluding \$161,113,900 inventories) of \$111,006,666. In 1909 the Steel Corporation's Working Capital (excluding \$163,811,280 inventories) amounted to \$66,062,161.

Few corporations as yet take the advanced stand of setting up separate items for "Working and Trading Assets." These items are usually grouped as "Inventories" and included among "Quick Assets" and therefore as part of "Working Capital."

Provisions of bond indentures and of preferred stocks in regard to the necessity of Working Capital maintenance usually are held to consider Inventories as Quick or Current Assets and therefore as part of Working Capital. In the examples already given of "Working Capital," the Inventory account has been eliminated as advised on page 109.

As showing usual practice the Working Capital of the International Harvester Company of New Jersey is given below for three years:

Current Assets:	1915	1914	1913
Inventories	\$25,977,504	\$35,402,598	\$42,666,951
Receivables (less loss reserves)	28,831,371	42,589,510	40,173,752
Cash	34,214,343	8,145,296	3,475,991
Totals	\$89,023,218	\$86,137,404	\$86,316,694
Deduct:			
Bills payable	\$17,891,280	\$21,743,300	\$26,672,138
Current invoices, pay ^r l, etc.	4,655,759	6,084,828	5,877,587
Interest and taxes, accrued.	1,009,920	859,925	875,860
Preferred div. pay. Mch. 1.	525,000	525,000	525,000
Preferred div. pay. Jan. 15.	500,000	500,000	500,000
Totals	\$24,581,959	\$29,713,053	\$34,450,585
Net working capital	64,441,259	56,424,351	51,866,109

Because of selling to farmers for notes the Working Capital of implement companies must be large. The decrease in the Inventories and Accounts and Notes Receivable is noteworthy, but the increase in Cash is phenomenal, apparently the result of a policy of liquidating Inventories and Receivables. Bills Payable show a declining tendency. The company not only increased its "Net Working Capital" but materially strengthened it by the large increase in the proportion and amount of Cash. However, in 1915 the company reported Cash Time Deposits which apparently had before been included as Receivables. Eliminating the inventories the Working Capital for the three years was:

1915	1914	1913
\$38,463,755	\$21,021,753	\$9,199,158

In comparison the M. Rumely Company exhibited, just before its crash, a Working Capital of \$12,275,826. Eliminating inventories of \$11,324,224 the Working Capital stood at \$951,602.

A corporation's Working Capital should increase normally year by year. It should not be seriously depleted except for good cause. Especially it should not be seriously depleted because of declaration of dividends. The history of large corporations during the first few years of this century was largely a repetition of the same financial blunder: weakening Working Capital through unwarranted dividends.

* "The inadequacy of working capital seriously ham-

*Sakolski.

pered progress. In acquiring control of their respective industries, a number of the new consolidations took over obsolete and dilapidated plants. Modernization and extension of these plants became necessary. Funds for this purpose had to be obtained from accumulated profits. Several of the industrial concerns endeavored to increase the profits by increasing prices, but this policy merely resulted in renewed competition and widespread popular disfavor. The policy of paying out in dividends an excessive amount of current earnings further impaired the Working Capital, preventing an expansion of operations and weakening the concerns against declines in profits arising from business depressions."

If current liabilities are larger than current assets, a Floating Debt exists instead of Working Capital. A corporation is usually in a bad way when confronted with a Floating Debt. It may have good business and a large amount of permanent fixed assets, but bankers, investment dealers and investors, as well as commercial creditors, take an attitude of skepticism. All seem to conspire to prevent the extension of further credit to enable the corporation to work its way out. Such conditions usually become acute during periods of general liquidation. In 1907 several large and exceedingly busy industrial corporations were forced into bankruptcy because of having a Floating Debt instead of a good amount of Working Capital.

XXXII

Reserves

THE necessity for adequate reserves has been taken up on pages 82-98 and 109-119.

Other reserves, aside from those set up to provide against depreciation of buildings, equipment, securities, materials, and accounts and notes receivable, may be provided for special repairs, e. g., relining blast furnaces, and to compensate for the exhaustion of an asset such as a coal or ore property which is being depleted.

Reserves are entirely different from the asset Funds, which must always be represented in cash or marketable securities. Reserves are amounts placed on the liability side of the balance sheet as special purpose accounts taken from Profit and Loss. The Reserve for Depreciation of Raw Materials, for example, is established by debiting (decreasing) Profit and Loss and crediting the Reserve for Depreciation of Raw Materials.

No cash or other special asset is represented by the amount placed in the reserve accounts. The amount of the Reserves are represented in the total of the assets on the opposite side. The amount credited to the reserves decreases or offsets the amount of free assets and by the amount of the reserves cuts down the Profit and Loss available for dividends.

Yet a reserve may be created for the special purpose of providing for regular dividends. Instead of a liability created to provide against loss, part of the Profit and Loss may be credited or specially earmarked as a Reserve for Dividends. Corporations having irregular earnings, such as the American Car and Foundry Company, have taken this method of setting aside directly part of Profit and Loss Surplus. Little is gained by such procedure, because Profit and Loss Surplus is itself a Reserve for Dividends.

Since no cash or special asset is represented by a Reserve a corporation might have a Reserve for Dividends amounting to a million dollars and yet not be able to pay a dividend requiring half that much actual cash. Cash might be low and still the Reserve be bona fide, represented in the assets as a whole.

XXXIII

Surplus

PROFIT and Loss Surplus is not a tangible account any more than the reserves. Though originating as undivided profits, the Profit and Loss Surplus will be found to be simply the remainder after subtracting the liabilities and the capital stock from the assets. It evidences the amount of assets above liabilities belonging to the stockholders aside from and added to the par value of the stock.

The surplus is real only if the assets are real, and if the liabilities are correctly stated. If a corporation has \$1,000,000 worthless "Goodwill" among its assets and \$500,000 nominal Profit and Loss Surplus, no actual surplus exists, but instead a true deficit of \$500,000.

Even when the book surplus is entirely bona fide, it is seldom available in cash assets. The Profit and Loss Surplus is simply an account of profits not used for dividends, but these profits usually have been used in the corporation's business. So the surplus may be represented in materials, in machinery, in plant or in part of any number of assets. It is quite possible for a corporation to have a splendid surplus in fixed assets, and yet be hard pressed for ready cash. Hence, while possible surplus is decreased by the cash expended in dividends, yet "paying dividends out of surplus" is scarcely a

statement of fact. Cash dividends are of course payable only in cash. Financial strength usually depends more upon the amount of free working capital assets than upon the amount of nominal surplus.

Capital Surplus is an account similar to Profit and Loss Surplus, but created in quite a different manner. Suppose 10,000 shares of stock are sold at 150 or \$1,000,000 par value sold for \$1,500,000. The difference of \$500,000 is not to be credited to Profit and Loss Surplus because it is not considered an earned profit account, but a separate Capital Surplus account.

Many balance sheets do not show Profit and Loss separately from Capital Surplus, but show the mixed account as simply "Surplus." Part of the Surplus item of one of the largest industrials originated from an exchange of securities. Second preferred 6% stock was exchanged for first preferred 8% stock at four shares of the 6% for three of the 8% stock. The actual dividend requirement remained the same. However, the capital stock amount was reduced and the company exhibited the difference as an addition to Surplus. No deception was intended and the transactions are explained in the annual reports, but an examination of the balance sheet leads many people to believe the large "Surplus" to represent only profits conserved from the business.

XXXIV

Book Value

A CONVENTIONAL measure of value of securities is "Book Value." This is the theoretical value of the common stock as worked out from the balance sheet without consideration of earning power. The liabilities, including the bonds, and the preferred stock at par are subtracted from the assets and the remainder divided by the number of common shares outstanding.

As an example take the Ford Motor Company's stock. Not having any bonds or preferred stock and negligible intangible assets (Patterns \$142,998, and patents offset by a reserve of an equal amount, \$61,473), the calculation is simple. The assets for 1915 totaled \$88,535,840 and the liabilities, including the unusual and large "Reserve for Buyers' Profit Sharing," amounted to \$27,400,064. Subtracted, the liabilities from the total of the assets left \$61,135,776, or a "Book Value" of \$3,056.78 per share. Cash and municipal bonds alone represented an equity of \$2,255 for each share.

ASSETS.

1915.

Cash on hand and in banks	\$43,788,151
Michigan municipal bonds at cost	1,311,924
Accounts receivable	2,300,456
Mdse. invent. at cost	14,335,768
Outside investments	9,200
Prepaid expenses	385,378
Real Estate	3,148,263
Buildings and building fixtures	12,931,884
Factory equipment	2,606,356
Furniture and fixtures	328,497
Power plant and machinery	5,693,649
Tools	1,491,825
Patterns	142,998
Patents	61,473

\$88,535,840**LIABILITIES.**

1915.

Accounts payable not due	\$4,947,806
Accrued payrolls	428,907
Accrued salaries	341,814
Accrued expenses	463,111
Contract rebates	1,281,661
Contract deposits	1,968,845
Res. for depreciation of fixed assets	2,885,189
Res. for depreciation of patents	61,473
Res. for fire insurance	51,263
Res. for buyers' profit sharing	15,000,000
Capital stock	2,000,000
Surplus	59,135,776

Total **\$88,535,840**

Calculation of Book Value is, of course, exact only as the accounts used are reliable and accurate. It is interesting to note how varying valuations of the property account affect analysis. For example, the ore holdings of the United States Steel Corporation have been estimated at from two hundred to twelve hundred million dollars.

The difference amounts to about \$200 a share for the common stock!

It is customary and generally only fair to disregard intangible accounts such as Goodwill in figuring Book Values. The inclusion of a large amount of Goodwill destroys the helpfulness of the calculation, as it is usual arbitrarily to make the Goodwill item large enough to balance the liabilities plus stocks.

At best, Book Values are usually of service only as they are checked by conclusions from other sources. As stated before, at a time when the old Allis-Chalmers preferred stock was worth practically nothing in the market, actual assets to the extent of over a hundred dollars a share stood back of each share. The assets were not negotiable and earnings were less than nothing.

On the other hand, F. W. Woolworth common stock when issued had no assets at all behind it. It was all water—it had no Book Value. Yet it sold around 80 "When Issued."

On December 31, 1915, the Book Value of the stock was only \$17 per share. Yet it sold no lower than 113½ during the month. Earnings averaging nearly 11% for the past four years made the value.



PART VI
INCOME FACTORS



XXXV

The Income Account

IN all commercial enterprises earnings are the final criterion of progress. It is better to hold securities of a thriving corner grocery or a 5 and 10-cent store than of a splendidly equipped cotton mill whose annual reports reveal chronic deficits. Great assets are of little avail unless they are capable of profitable business.

While the Balance Sheet is supposed to show the relative solvency of a corporation at the end of the fiscal year, the Income report shows the changes which have occurred during the year affecting the balance sheet. The Income account shows the conduct of the business and the losses and gains. Yet the skepticism of a "Down East" horse trader must accompany the examination of even the most promising income account. No more than the balance sheet is it devoid of possibilities of misrepresentation and abuse.

It is unfortunate that the lack of standardization prevents exact comparison of income accounts of different companies. In time, standards will be worked out, perhaps by the Federal Trade Commission, and enforced by special authority. Until some such action is taken accounts will only gradually approach any semblance of standardization.



XXXVI

Consistent Form Necessary

THE best accountants, otherwise of calm and judicial mien, differ violently as to the form of the simplest Income Account and as to the very names of the items. In fact, one eminent accountant found the name of what will here arbitrarily be called the "Income Account" masquerading under some sixteen aliases.

Yet the Income Account is usually much easier of comprehension than the balance sheet, and assuming that the methods of accounting in individual corporations remain unchanged, the Income Accounts may be analyzed with some satisfaction.

Accounting methods change with changes in control, in deference to suggestions of public accountants, and sometimes with exigencies of a situation apparently demanding bolstering. A careful perusal of the "General Remarks" and of footnotes to the Income Account in annual reports will often clear an otherwise inexplicable discrepancy in the figures. For example, a phenomenal increase in sales may result simply from acquiring the business of a competing company. If the amount paid is not large, even an examination of both balance sheet and Income Account proper would not disclose the changed basis.

Items like insurance, rent and taxes may one year be placed as operating expenses and the next as among the fixed charges. Leaving aside theoretical considerations the present interest is only that the basis of accounting be not changed without corresponding reconciliation of the figures. The Income Accounts for several years are required for a fair consideration of a corporation's earning power. If, therefore, we find that in 1911-1912-1913 insurance, rent and taxes have been treated as operating expenses, and in the next two years as part of fixed charges, the Income Accounts are not strictly comparable until adjusted.

Income Accounts are usually lamentably incomplete and presented only in devitalized form. To the extent that they are lacking in definiteness and detail they are baffling to intelligent speculation and investment.

As with balance sheets, analysis of Income Accounts is futile unless the results of all activities are combined in a consolidated form of Income Account in which all the profits and losses of all the subsidiaries, if such there are, appear. Unless such an Income Account is presented, unpleasant information may easily be hidden.

Suppose the A, B & C Steel Company has five subsidiaries, of which four contribute in the form of dividends some \$500,000 to the net income of the holding company. Suppose the other sustains a net loss of \$250,000. It has proved very possible to take into the Income Account of such a corporation the dividends received without a word as to any loss sustained. The backslider simply does not figure in at all. In fact,

losses may be so concealed indefinitely. On the other hand, unless a Consolidated Income Account is shown, extraordinary profits may be concealed without difficulty by having the thriving subsidiary declare in dividends only a small fraction of actual gains. In order to have a complete basis of analysis a holding corporation must present Consolidated Balance Sheets and Income Accounts and Balance Sheets and Income Accounts of each subsidiary.



XXXVII

Gross Sales

GROSS Sales or Gross Earnings usually head a corporation's Income Account. This account should designate the corporation's total receipts from regular corporation operations before any deduction for cost or expense has been made.

Of course, Gross Earnings is the proper account name in the case of a corporation depending for its income, say, upon the licensing of machines or patents, but, as always, in examining reports one cannot believe "half of what he sees." Since earnings indicate corporate progress the temptation to pad them becomes, in times of stress, acute. No earning is bona fide unless entirely realized. Yet in times innumerable have supposed increases in the value of real estate or of inventories been considered as actual profits by managements anxious to make a showing, neglecting the "cost or market value, whichever is lower" edict of all sound accountants. Even estimated profits from contracts not yet completed have been drafted to reinforce an otherwise unpromising Income Account. Such procedure indicates the necessity of certification of the Income Account by a first class firm of public accountants, given unlimited authority, before Income can be credited entirely. The account Gross Sales or Gross Earnings is not seldom omitted because

of the antiquated belief that from its examination competitors may gain damaging information. Yet a more sinister motive may be possible.

As showing the possibilities of manipulation of figures a steel products corporation showed one year a sudden increase in Gross Sales. Investigation proved that the company had sold a large plant (capital asset) and credited the amount to Gross Sales.

Obviously a comparison of Gross Sales from year to year will show whether a business is pleasantly improving in volume from year to year and whether sales are consistent or subject to violent fluctuations. At least equally important a result of the Gross Sales item is the light to be derived from its use with other figures in determining the trend of actual profit.

Suppose a company's Gross Income, or Gross Sales, minus the cost of materials, labor and other ordinary operating costs, has been \$100,000, \$110,000 and \$125,000 per annum. A very fair indication this, apparently, and if no other figures were available or suspected as holding further significance, would be considered splendid business on a reasonable capitalization. But suppose we find that the Gross Sales have been \$1,000,000, \$1,800,000 and \$2,500,000, showing a striking but not at all unusual growth in some lines of business. The cost of doing the business, before deducting depreciation, maintenance, interest and dividends, has been increasing from 90 to 93.89 to 95% of the Gross Sales, leaving net earning of 10, 6.11 and 5%. These easily derivable figures indicate a condition demanding scrutiny because a small further de-

crease in the Gross Income per dollar of Gross Sales would obviously be dangerous. Such a conclusion would not at all be apparent if the amount of Gross Sales were not available. "Large business and small profits" works out all right until the percentage of profits approaches the vanishing point.

XXXVIII

Operating Ratio

THE cost of doing business may just as well be called the "Operating Ratio" and considered a prime measure of corporate development, just as is the same term when used in railroad analysis.

The electrical equipment business is one in which competition has forced a narrowing of margin, though not to a minimum at all alarming and apparently well under control.

* For the past twelve years the sales, the cost of sales, including depreciation, and percentage, the latter, forms of gross of the General Electric Co., are set forth in the following table. The merging of the business of subsidiary companies from time to time, accounts for some of the big changes in the figures. For instance, the business of the Fort Wayne Electric Works, Sprague Electric Company and the National Electric Lamp Company is included for the first time in the 1912 statement.

**Wall Street Journal.*

Year	Sales	Cost of Sales	Operating Ratio
1915.....	\$85,522,070	\$76,898,182	89.9%
1914.....	90,467,691	81,496,728	90.0
1913.....	106,477,438	96,207,833	90.3
1912.....	89,182,185	81,074,192	90.9
1911.....	70,383,854	62,460,557	88.7
1910.....	71,478,558	63,134,601	88.0
1909.....	44,540,675	41,649,573	93.5
1908.....	70,977,168	65,536,305	92.3
1907.....	60,071,882	53,106,594	88.4
1906.....	43,146,902	37,025,346	85.9
1905.....	39,231,328	33,528,135	85.5

Profits in the steel business are more liberal to the corporations best able to compete, yet the cost of doing business or "Operating Ratio" of the United States Steel Corporation tends to increase, largely because of wage advances and the increase in general expenses.

Railroads are obliged to report every item of expense as well as of receipt in carefully worked out and itemized classification. Until this is demanded of industrials it will not be possible to compute the ratios of the different cost and expense items to Gross Sales with any certainty.

It is not remarkable that under the guise of items making up the cost of goods sold, large amounts may be included as repairs and similar expense accounts which are actually expended for replacement of machinery with materially larger production than that scrapped and any number of other improvements and extensions. Such "plowing in of earnings" takes place even under the stringent rules which govern railroad accounting and is usual with prosperous industrials. So it is possible that

an increase in Operating Ratio may simply indicate extreme conservatism of management.

On the other hand, if a consistent increase in the cost of operation in proportion to sales is caused by increased cost of labor, power, necessary repairs, or selling expenses (except advertising which will probably have future value), the increase must be considered unfavorable.

Since items of cost or expense are given in few reports, unless it can be proved that maintenance and depreciation charges have been neglected, a decreasing Operating Ratio must be regarded as resulting from actual increasingly profitable operation, and an increasing Operating Ratio as at least dubious.

Until accounts are more nearly standard, comparison of accounts of different companies, even in the same lines, is apt to be disastrous, because little actual basis exists. Of course it is useless to compare a company having normally a rapid turnover, such as a biscuit company, with an Operating Ratio of 91% or so, leaving 9% of sales as Gross Income, with that of a steel corporation which scarcely turns over its capital once a year and has an Operating Ratio of 75%, with 25% of gross sales for Gross Income.

The amount left from Gross Sales after deducting all operating expenses, such as manufacturing costs, administrative and selling costs, has just been called Gross Income. Then the expense items of maintenance and ordinary replacements, which are depreciation accounts, are subtracted. An extra amount of depreciation aimed to cover the loss through obsolescence is also deducted if

the entire depreciation is handled as expense items.* The remainder is called Income from Operations or Operating Profits.

*See page 84.

XXXIX

Other Income

SPECIAL profits or losses should be separated from those due to the normal operations. These special results should show in the "Other Income." Recently several large industrials have organized subsidiaries and through them have entered a field formerly strange to them—that of war business. This has proved decidedly unprofitable in several instances. The results of all such outside activities, favorable or unfavorable, should be added to or deducted from the net earnings and not consolidated with the general normal income.

The most usual source of Other Income is from the receipt of interest and dividends from securities owned. If this amount is large its continuance or increase is a matter of importance to be verified only by an examination of the securities. Many corporations have issued their own securities, usually bonds, with which to pay for securities considered at the time of purchase highly desirable for holding in the corporate treasury. The well-being of the acquired securities may then be of paramount importance because discontinuance of the income may spell disaster to the purchasing corporation.

The American Sugar Refining Company has in past years of liberal profits placed in its treasury as investments so many good stocks that its Other Income is rela-

tively large. Its investment account stands at some \$22,577,772, from which its income in 1915 was \$2,312,646; almost equalling its normal business profits of \$2,991,465. The company made a further "Other Income" profit of \$880,609 from profits on securities sold, so that its "Other Income" was well above its net earnings.

It is quite usual for some classes of corporations to be interested in others which perform special duties. The General Electric Company, for example, owns practically all the common stock of the Electric Bond and Share Company, which promotes public utilities requiring electrical equipment.

Further usual sources of Other Income are interest received on bank balances and rentals of property owned. Proceeds of capital assets, such as a plant or a parcel of land, are often included in Other Income. Such practice does not seem justified. It is not all Income any more than the gross proceeds from any other sale. It is more logical practice to include only the profit on any such transaction, leaving the balance sheet and Income Account in accord. It is still better practice to include such unusual items with the Profit and Loss later on, in order to keep the Other Income account for different years comparable.

XL

Total Income

THE Other Income added to the Income from Operations or the Operating Profit gives the Total Income. From the Total Income are deducted taxes, rentals, royalties, guarantees, insurance, and cash discounts on sales. These expenditures are subtracted from Total Income because they are considered "expenses of capital, the expense of obtaining, using and protecting capital, set up separately in order to show what the Income from Operations would be if there were no expenses in connection with capital."* The result is called Total Income Prior to Interest Charges. Interest actually belongs among the expenses of capital, of course, but is separated simply for convenience in analysis.

* See Wildman's "Principles of Accounting," 231-275.



XLI

Interest

INTEREST charges should be separated into charges against short-time debts, such as bank loans and accounts payable. If the balance sheet shows a small amount of bank loans while the income account shows a large charge for short-time loans, it is probable that the company is far back on its payments for goods and is paying substantial interest to trade creditors. This may be evidence of weakness requiring attention. If the interest account is not separated it is not difficult to find out how much has been paid for short-time loans from banks or trade creditors.

Suppose the total interest paid is \$100,000 and the balance sheet shows \$500,000 5% bonds and \$500,000 6% notes, the funded debt would require \$25,000 + \$30,000 or \$55,000 showing \$45,000 applied to unfunded debts. If fair interest rates were about 5%, the balance sheet would probably include twenty times the interest charges, or \$900,000, of unfunded interest-bearing loans.



XLII

Profit and Loss—Surplus

AFTER interest charges have been paid, leaving Net Income, a company usually has several additional Profit and Loss items to take account of. Profits made on sales of real property or securities are often and preferably added or credited to the Net Income left when interest charges have been charged off. Amounts written off to cut down accounts such as Goodwill, Patent and Organization accounts are next subtracted or debited. The amounts written off are likely to be determined by the prosperity of the year's business. In poor years the amount written off will be small, one of the measures taken to show satisfactory Net Profits for the year.

Most companies make up their Income Accounts so that all "Profit and Loss" items are entered before interest is deducted. This, however, is quite contrary to the well accepted principles of considering them "Profit and Loss" credits and debits.

Dividends are deducted from Net Profits, the preferred stock dividends taking precedence.

The amount left after dividends is the Profit and Loss Surplus, which is added to the Profit and Loss Surplus existing at the beginning of the year.



XLIII

Margin of Safety—Average Profits

THE Margin of Safety of bonds is the proportion of Net Income left after paying all fixed charges. A company which earns \$1,000,000 and has \$200,000 fixed charges, leaving \$800,000 or 80% Margin of Safety above fixed charges, should be in better condition than if it had the same earnings and \$800,000 fixed charges, or a Margin of Safety of 20%.

The Margin of Safety over preferred stock may easily be reckoned by including after Profit and Loss entries, if any, the required dividends on the stock with the fixed charges before figuring the percentage and the Margin of Safety over the common stock by including its dividend return with the fixed charges and the preferred dividend returns. Suppose with \$1,000,000 earnings, fixed charges are \$200,000, preferred dividends \$200,000 and common dividends \$200,000. The fixed charges and all dividends are \$600,000 and the remainder \$400,000, is 40%, which is the Margin of Safety over the common stock disbursements.

The strength of a corporation may be fairly tested by the Margin of Safety, checking up other conclusions. If the Margin of Safety over the different classes of securities is increasing, other things being equal, the cor-

poration's bonds and stocks may be considered as growing safer and stronger.

No figure given out to appeal to investors is more common or more deceptive than that of "Average Profits" (really Total Income Prior to Interest Charges) for 3, 4 or 5 years. It would seem that such a figure, unsupported, would have little purpose except deception were it not that investment houses are often forced to tell a story not at all complete because of the unfortunate proclivity of the typical investor to be scared away by adequate information. Net profits may run \$500,000, \$400,000, \$200,000 and \$100,000, yet the "average" will boldly stand out at \$200,000 per year, showing interest requirements on a bond issue of \$1,000,000 earned six times.

Net Income for at least four or five consecutive years must be given if any dependence is to be placed on consistency of earning power. Having the results by separate years, a simple average may prove helpful if conditions have been fairly normal throughout the years averaged. Ofttimes a good reason exists for a drop in income for a year or so, say a general depression such as was the initial result of the beginning of the European war, a sympathetic strike, etc. To the careful man, the whole record explained, even when containing a time of lean profits, is more attractive than the always dubious mystery of "Average Profits."

New Promotions.

FOUR hundred and sixteen advertisements of stock offerings appeared in one Sunday edition of a New York newspaper some years ago. Of all these glittering opportunities, only one is today worthy of a place outside of Smythe's "List of Obsolete Securities." A stubborn wealthy dupe still plays angel to the exception rather than admit his lack of judgment.

Every boom time produces a generous supply of new corporations and recapitalization of older concerns. The present year is no exception. The day is dull which does not herald the offering of some new chemical, steel or rubber flotation.

A part will outlive the coming storms, because promoters have certainly profited by the experience of the nineties and the earlier years of the present century. Capitalization is mostly in common stocks which, upon the appearance of choppy weather, require no return. Still, prospective investors can well look ahead a bit before exchanging the results of years of toil for well executed steel engravings. An investor, at least theoretically, buys for a dividend or interest return on his capital, and it boots him little if his securities escape assessment yet reach a position of hopelessness from a yield standpoint.

Of course, the more speculative an enterprise, the more careful should the investor scan the sky. At the height of prosperity, optimism is general. Offerings of stocks in companies ranging from tooth powder to automobiles scream forth from circulars, booklets and periodicals, and even telegrams. Legitimate enterprises may survive depressing times, but it must be remembered that flotations made in times unusually prosperous are not usually put out on a basis which inspires deserved confidences. Even if an enterprise is not of a speculative nature, say staple hardware supplies, calculations for the future based on boom time business are misleading. Also, machinery, supplies and plants even at bona fide valuation represent figures which are certain to appear excessive later on.

At the end of a long period of depression, when clamors of ruin still are heard, but when prices of commodities are low and labor efficient, then is the time to take an interest in new propositions.

Some must take a chance. Some must pioneer, build tooth powder factories, catsup plants, and finance moving pictures. The country must go on developing. Yet the best of new companies have their troubles, and, by and large, Andrew Carnegie was certainly right when he remarked (though perhaps apropos of something else) that "Pioneering does not pay." Some must pioneer, but as a principle, the early securities holders in a corporation lose. More than 95% of times intending investors or speculators would do best to file away promising prospects or advertisements instead of purchased certi-

ficates. They will, as a rule, either escape the burdens of reorganization, or at least be able to purchase the securities later at a more favorable basis after hopes and realities have had an opportunity to convene. It is seldom possible to keep up unwarranted market prices for any length of time without an obvious showing of weakness, as has been strikingly illustrated in stocks such as Davison Chemical, Federal Dyestuffs, Pugh Stores and Emerson Motors, to cite recent flotations. In fact, the market for certain important stocks, enthusiastically introduced, simply vanishes within a few weeks of the date of offering.

"Out of town" purchasers should always confirm prices on securities urged upon them. Marked discrepancies often are shown. As an example, which is obviously unusual, the writer a few years ago happened to be in the Big Bend country of the State of Washington. A new stock was being sold in large quantities in the city of Pullman at \$54.00 per share, which was selling in Boston at \$4.00 per share, and which is now entirely worthless.

It is remarkable that the more venturesome the nature of a new offering of stock the more strongly do the sellers emphasize the attractive features as an investment. An exceptional instance is refreshing.

At the time the Triangle Film Corporation was floated, with Messrs. Griffith, Ince, Sennett, Bauman & Kessel and Aitken, Mr. Aitken actually came out warning the public against too great expectations and pointing out the speculative nature of the business.

Such a step was revolutionary, but highly laudable, for such a stock is at best only a pure speculation. Unfortunately, the warning was only too well founded. The company has not done as well as expected and the stock has drastically declined.

A large part of new propositions involve recapitalization of old established businesses. On the face of the statements usually made, such securities seem entirely safe, yet history writes a doleful tale of a large part of these flotations.

Most of them are made at the wrong time, *i. e.*, at the height of prosperity. An example of this is the experience of the Milliken Brothers, which floated a large issue of bonds in 1906, erecting a large steel plant at top prices for labor and material. The company has been in the hands of receivers since the following year.

A substantial proportion of grossly enlarged capitalizations occur because of importunities of underwriters than actual needs of the corporations affected. Examples of prosperous corporations burdened by over-expansion are: The M. Rumely Company, McCrum-Howell, and the Emerson-Brantingham Company. Of course, a small issue of stocks or bonds by a company which has been consistently prosperous over a series of years, with statements which are complete enough to admit accurate analysis, will usually turn out all right if issued in normal times. This is not the class of securities referred to in this discussion.

Since the bulk of flotations is made during boom periods, it is not surprising that the original sale price

of good quality securities is usually higher than that prevailing within a comparatively short time. J. I. Case Threshing Machine preferred, Cuba Cane Sugar preferred (a market decline occurred in the latter issue before events leading to the Cuban rebellion developed), and the United States Rubber bonds, are notable cases in point, taking issues which have not lost favor because of actual or probable loss in earning power.

In spite of all the warnings of financial history the most toothsome bait spread by promoters of the wily variety is the glorious history of similar enterprises. Before me is a full page advertisement of a company which at the very height of the bull market of 1916 proposed to manufacture paper from sugar cane refuse. No earnings were presented, no list of officers or directors, not the name of a single individual except Mr. Alexander Graham Bell, Queen Isabella and Columbus, no balance sheet, no plant in operation, nothing to prove that such a process is practical, and yet the heading of a page of the *New York World* for Sunday, October 15, 1916, reads, "Do you want to turn \$100 into \$15,000?" with a subtitle, "Or have a \$10 bill grow into the price of a good automobile?"

Another advertisement at hand calls attention to the necessity of "investing at the start of the company."

"To make the greatest profit you must invest at the start of the company. In the cases of original investment, in the stock of Goodrich, \$100 has returned \$69,600; Dunlap, \$100 has returned \$50,000; Kelly-Springfield, \$100 has

returned over \$10,000; Firestone, \$100 has a value of \$9,168; Fisk, \$100 has returned \$12,400."

A perfectly responsible tire company recently marketed its shares in a legitimate and businesslike manner. For a time the price held well, then late in 1916 slumped off, and announcement was just recently made that dividends have not been earned. The company had been unfortunate in a "run" of the tires.

Does the new company propose to build automobiles? The name Ford appears in print as soon as in thought. By the age of forty, after years of discouraging experience, Henry Ford had built, not manufactured, just eight cars. Meanwhile, two companies formed to capitalize his genius had failed.

Is the project to do with electricity? Then the possible chance of purchasing Bell Telephone stock is brought out. One dollar invested woke up as a million, etc. Nothing is said of the years intervening when the shares were worthless, nor of law suits costing \$350,000—decided on a fluke. Is the new project in agricultural machinery? The success of the McCormick plant is ushered forth. McCormick failed twice. Original "investors" secured experience. The original backers of most successful phonograph companies lost.

The path of difficulties to be faced by a new proposition is splendidly indicated by the experience of 1915 and 1916. Large steel and railway equipment companies took hundreds of million of dollars of contracts from European Governments. Mind, the organizations

already existed, the business was in allied lines, payment money was in the bank in advance, and contracts were signed at outrageous terms that not only promised splendid profits, but that any new construction necessary was to stand as gifts at the completion of the first work. Yet before the end of 1916, stock prices discounted blasted hopes. For one reason and another, profits faded, and few indeed were the firms which have actually made money in war orders. Several of the largest contractors were obliged to beg mercy from the governments which they planned to gouge. Included among the disappointed corporations were companies which had been in the ammunition business for years. If long established, smoothly running firms run into the difficulties encountered by the war contractors of 1914 and 1915, consider the chance of the innocent investor in an absolutely new project, with no plant built, with business only in prospect and the future only made bright by "painting the blue," as stock salesmen say.

Of course a new project must promise well or there would be absolutely no object ever in venturing. Certainly no basis is evident for the investment in 1916 for huge sums of money in preferred stocks and in bonds of new, untried enterprises, where the possible return was only from 5 to 7% at a time when British Secured 5½ bonds, convertible into British twenty-year bonds free of all British taxes were selling on a basis of over 6%! A convertible feature or a bonus of stock is often included with an issue of bonds of a new corporation.

This is entirely desirable, but the convertible feature or the stock must be carefully analyzed. The speculative feature may be quite remote from probable value.

Yet the proposition offering a certain return of 10% or more, will upon examination nearly always develop glaring fallacies which the average "investor" overlooks because he finds it so easy to believe that which he wishes to believe. This human failing is the only license the questionable promoter or "underwriter" has for existing.

In order to sharpen the appetite of prospective investors, earning statements are sometimes made up covering not realized profit, but profit to be derived in the future from contracts made. Such procedure is not uncommon among promoters of highly speculative securities. Most new securities have earnings only in prospect. One recent flotation showed weekly earnings by weeks for just five weeks.

The most certain indications of a promotion profitable only to the promoter, are statements that contain some reflection against Wall Street banks and methods. Not that Wall Street is perfect, but the writer has yet to see advertisements of securities abusing Wall Street methods which would stand analysis.

Perhaps the most common lure cast out in the promotion of new securities, is a price below par. "You can buy this stock which has a par value of \$10.00 for \$4.00 a share." Of course, it makes little practical difference whether the stock is sold at par or 40% of par as far as the success of the enterprise is concerned,

provided enough stock is sold to fill capital requirements. If it is sold at 40% of par, just two and one-half times as much stock must be sold as though it was offered at 100% of face value. Each share sold at 40% of par is simply worth to the company, and so to the purchaser, 40% of a share disposed of at nominal or par value. Of course, the more stock sold, the less dividends can be declared on forthcoming earnings.

A stock, especially one of \$100 par value, sold at a discount, often has a better market than one sold at par, because discount securities appeal to purchasers having small amounts of money to place. Yet practically the same result is obtained by making the par \$50 or \$10 or \$5, and placing the offering price at par or above. At the time of organization banks usually sell their stocks at a premium in order to start business with a surplus. This is a splendid practice and could, to much advantage, be considered in the promotion of other securities.

When no par is given at all, a person will usually take more interest in the actual value of the stock than when his mind is distracted by an arbitrary par value. Some sort of analysis is necessary to show value at all when no par is given.

As to the amount of stock offered in a new proposition, the only limits are that enough be sold to assure sufficient capital to go ahead with the project in view, making liberal allowances for contingencies, and that too large excess be avoided, because capital not well employed will require returns just the same as that

which is absolutely necessary. The American International Corporation met the problem well by issuing stock upon which only half of the subscribed cash was required at first. As more capital is needed, purchasers will be called upon for the remainder of their subscription.

Of course, good management is indispensable in any enterprise, old or new. In fact, management is far more important than the nature of the project. Innumerable factories which once made furniture, carpets, paper, hats, shoes and electric bulbs, are now deserted, while companies making hair tonics, gold divining rods and electric belts, are declaring regular and extra dividends. Good propositions go only when well managed, and good management may pull through the most worthless projects.

Some of the best propositions possible to imagine have died from one or more of the ailments to which infant corporations are prone. What more logical and promising plan than cycle car manufacture—what more solid than the round cotton bale proposition? Such examples could be multiplied.

On the other hand, many successful corporations, especially smaller ones, succeed, but only to the advantage of those at the head, officers and directors absorbing the profit in salaries and bonuses. Such practices have injured the standing of the motion picture corporations.

It is not surprising that the American International Corporation has successfully floated its securities. Its directorate and active management is so strong that capi-

tal would follow it in any project. In fact, the activities of the American International Corporation cover or will cover in the future all sorts of projects all over the world. If one must speculate on an entirely new enterprise, he cannot do better than join in such a speculation as American International Corporation, in which sufficient capital and the best brains in the country have united. It has been one of the most successful flotations of an industrial corporation ever attempted. At that, it would not be surprising to see the stock sell lower in a general slump than the original offering price.

Local pride has caused innumerable losses to investors. A new project appears with plans to build a factory. Immediately come visions of large constructions, permanent payrolls, all the advantages of increased industry. Local business men, from bankers to laundrymen, figure that even if the security investment does not pay, indirect results will make a liberal stock subscription worth while.

No doctrine could be more hopeless. If the new enterprise succeeds on its merits, well and good. If it does not, the whole community will suffer and not only will the primary investment be lost, but much good money will be thrown after bad. A small, well situated city of the Middle West is today smaller than thirty years ago. Such a statement seems incredible, but it is true. The loyal, ambitious business men have backed enterprise after enterprise only to have it fail. In no case would these men have "invested" had the new plants located in the next town.

Prospectuses are notable for what they do not contain. They are properly constituted to attract and interest, but the information contained is seldom convincing to the sophisticated, and further facts must be demanded to afford a fair basis of judgment. To be sure, the reputation of the security house is most important, but the best of security houses make mistakes and the prospective investor can, by analysis, select the best securities from offerings and from the open market, securities both new and old.

The New York Stock Exchange requires a "Listing Statement" prior to the admission of a new security or additional amount of an old issue. This "Listing Statement" must contain information about assets and liabilities, earnings of subsidiary companies, etc. However valuable these statements are, and they are valuable, their usefulness is circumscribed by the fact that no responsibility is taken for the authenticity of the information imparted.

When a corporation issues new securities, whether the amount be large or small, the prospective purchaser should insist upon knowing whether the balance sheet represents the company's status before or after the receipt from the securities were taken into the company's treasury. Balance sheets prior to the financing and subsequent to the receipt of the proceeds from the underwriters should be shown in order to show the need and the immediate disposition of the funds.

It is more than interesting to note some of the provisions of the British Companies Consolidation Act of

1908. This contains 296 sections and "governs the careers of all limited liability companies from the cradle to the grave. It determines the essential particulars which their prospectuses shall contain and regulates their demise when the hour of liquidation strikes."*

The prospectus, according to the British Companies Act, must contain full facts of the nature of and the extent of the interest of every director in the plan and promotion of or in the property proposed to be acquired by the company, and the number of founder's or manager's shares.

The amount payable in cash, shares or bonds, to a person or persons for any property acquired or proposed to be acquired, specifying the amount, if any, payable for good will.

The amount, if any, paid within the two preceding years or payable, as commissions, for selling stocks or bonds.

The amount, or estimated amount, of preliminary expense and the amount paid within the two preceding years, or intended to be paid to any promoter and the consideration for any such payment.

Dates of and parties to every material contract, except contracts entered into in the ordinary course of business, and a reasonable time and place at which any material contract or copy may be inspected.

*Philip Tovey, "Prospectuses—How to Read and Understand Them."

Liability is assumed by every director or promoter, or underwriter, for any loss or damage sustained because of any untrue statement, unless for good reason responsibility cannot be proved.

Such a code at least suggests to Americans where our practices are lacking. Little excuse seems possible for the owners of a business being able to unload properties upon "bankers" or "underwriters" at inflated values, which properties are then unloaded at still more inflated prices to the innocent investor.

The cost to the promoters of the properties entering the United States Steel Corporation was public property, also the payment, large as it was, to the promoters. Promoters and underwriters are worthy of their hire, but their relation is, as should be, one of trust, and their compensation should always be public information. As it is, a stock may be floated at 70 "retail," which security houses take over at 64, while the promoters buy the properties involved at an equivalent of about \$27 per share. What chance has the investor at \$70 in having a security which will steadily return income on the amount invested?

It is an actual fact that a large part of the promotions made are taken over on a basis which gives the security promoter 65 per cent. of receipts from investors. 25 per cent. on a new proposition is not unreasonable on account of the large expense necessary and the risk involved in cases where the promoter and underwriter assumes large responsibilities. He is worthy of his hire, but when only 35% or so of an investor's money

reaches a company's treasury the chances for success are obviously remote.

Recently a new motor car issue was offered on the market. Its promoters have apparently made every effort at publicity. For example, it issued an official statement showing the progress made from the first months of its operation. Here was cash, for example, of \$253,131, real estate \$61,300, salaries paid \$1,232, advertising \$7,102, machinery outlay \$22,559, and opposite the amount of receipts, by the sale for cash, \$425,516.

But nowhere was a statement of how many shares had been sold to obtain the \$425,516. No hint as to the amount of the stockholders' remittance, or the par value of the total amount of stock sold. Was it \$425,516 or \$4,255,160? How much per share reached the company's treasury?

Of course a prospective investor is even comparatively safe only when purchasing new securities from long established, substantial firms of good reputation. After an unfortunate flotation of securities the small firm can and often does, simply abandon its office furniture, and is seen no more. On the other hand, some of the largest firms have had unenviable records, and how they manage to replenish their clientele is a standing mystery.

All houses which assume the marketing of a new issue should not only insist upon the appointment of a reputable accounting firm as auditors, and quarterly statements of earnings for publication, but at least one representative on the board of directors, in order to safeguard continuously the interests of their customers.

Not long ago the writer was talking to a man who is an executive officer in twenty-five to thirty corporations, large and small. The writer hazarded his conviction that it seldom paid to purchase securities in new propositions—that by and large it didn't pay. "Well," was the reply, "it's according to whether one gets in on the cellar or the garret level."

Promotion schemes are certainly devious and a prospective purchaser of new securities can well afford to hold his funds unless every fact is demanded and verified, and every consideration analyzed. Then, if on the whole the proposition has merit, he may be justified in venturing such a part of his funds as he could spare permanently without sacrifice. The conservative man will let the acid test of time work on a security and then if it proves worthy of confidence, purchase it at times such as when gold coin sold at a premium on the New York Curb, the market where so much history of industrial securities has been reflected.

The Story of an Institution

I

"IF THAT rich old uncle of yours should break your heart by suddenly passing away and leaving you twenty-five thousand dollars in stocks and bonds, it might very well be that, despite your grief, you would find time to look over those securities and wonder what they were worth, anyway. Fortunate, indeed, you would then be if you had a friend in John Moody, the demon statistician of Wall Street.

"OH, YES,' John Moody would say, 'Choc-taw, Oklahoma and Gulf 5s'—and forthwith he would proceed to enlighten you as to all the factors entering into the question of those bonds' safety and salability—upon how many miles of railway they acted as a lien, the total amount of securities authorized and outstanding in connection with this mileage, the income available for paying the interest, the sources from which the income was derived, the general financial and physical condition of the issuing company, etc., etc.

"JOHN MOODY'S head is as full of figures as ordinary cocoanuts are full of milk. You see, it takes many kinds of businesses to make up a country, and it is his business to know everything about every kind of security afloat. It is reported on good authority that he not only feeds on statistics by day, but sleeps between balance sheets at

night. For him the modern feminine costume has no terrors, since he long has been in the habit of subjecting all figures to cool analysis, knowing very well how they can be made to lie when handled by gay deceivers. * * * As his work is designed for the guidance of investors of all kinds, including savings banks and insurance companies, it is easy to imagine what value it would have if the man behind it was not as far above suspicion as the wife of Cæsar. But if John Moody has a price no one has yet bid high enough to meet it, and he has them all on his list exactly as he sees them—the cats and dogs in the securities family along with the gilt-edged.

“A PROFOUND as well as disinterested student of values, John Moody got his early training in one of Wall Street’s conservative banking houses. At the age of twenty-one he started in with this house as a stamp lick and errand runner. At the end of eight years, however, he had risen to the head of his employers’ selling department; and then, in 1898, he found his long suit. It was only a few years before this time that conservative bankers began to deal to any extent in securities other than those of railways and municipalities, but electrical developments now were putting on the market a host of trolley, telephone and other public utility securities, and the era of giant industrial combinations was in full blast. And so, out of his native love for exact information, John Moody conceived the idea

of organizing for his banking house a statistical department in which the facts and figures about the flood of new securities would be ready to hand. And this, his first original work, being a great success, it immediately gave him the ambition to become a sort of statistician extraordinary and analyst plenipotentiary to all of financial America. * * *

"IMMUNE from the fever of speculation, John Moody watches unmoved the fortunes of those who come and go in Wall Street, and whether there be a boom or a panic, is concerned only in getting at the causes thereof. His doctrine is that speculation is only for professional speculators; that for the investor with a few hundred dollars there is nothing like savings banks; and that more money is lost in so-called investment than in so-called speculation, when investors fail to keep in mind that, while every security must respond in a general way to the broad trend of business and public credit, it is much more susceptible to those specific conditions which are peculiar to itself."—F. B. COPLEY, in the *American Magazine*.

II

AN INSTITUTION is but the lengthened shadow of a man. The institution known as "MOODY'S INVESTORS SERVICE" as it stands today is the outgrowth of the twenty-six years' labor and experience of John Moody. For years Mr. Moody has occupied the one absolutely independent position in Wall Street as an advisor on investments

for banks, financial institutions and private investors. He possesses a national reputation as an impartial student and judge of investment values. He is in no way interested in the buying and selling of securities either for himself or for his clients; he has no "entangling alliances;" he does not give "free" advice, nor does he seek the opinions of "interested" authorities.

THAT THE service rendered by Mr. Moody's organization is all that is claimed for it is well demonstrated by its very large success and steadily growing sphere of activity. Seven years ago its active clientele was limited to a few hundred investors and financial institutions; today they are counted by the thousands. Within the past two years the paid subscription list to the full annual Service has grown nearly 400 per cent, the recent growth being divided about equally between banking institutions and bankers on the one hand, and individual investors, trustees of estates, etc., on the other. Of the accredited bankers and banking institutions of Greater New York, more than one-half are subscribers, while the full list covers every State in the Union, all sections of Canada, and numerous subscribers are listed from Great Britain and the European continent, not to mention important representations in South America, China and Japan. The gross receipts from subscriptions and fees now run up to several hundred thousand dollars, while the amount of securities actually ex-

amined and passed upon each year by the organization aggregates several hundred million dollars in value.

TO OPERATE a business of this kind involves an extensive organization and a large corps of experts. Mr. Moody retains a force of highly efficient specialists and analysts, besides which he continues to give his close personal attention to the interests of all his clients. Personal supervision has always been a marked feature of Mr. Moody's work, and even the smallest investor knows that his interests are never neglected in this office. How closely Mr. Moody keeps in touch with the affairs of his clients is indicated by the fact that during the past seven years he has personally dictated over 50,000 letters to subscribers, all on purely investment subjects.

THERE ARE no outside financial interests in any way identified with "MOODY'S INVESTORS SERVICE." The business is owned entirely by Mr. Moody and his partners and its ample capital is their own. The credit and standing of the organization are of the highest type, and its integrity is proven by its unusual confidential relations with its several thousand clients.

What We Do for the Investing Public

THE SERVICE rendered is a comprehensive one, and covers the needs of every class and every type of individual investor and financial institution. It is supplied to clients on an annual subscription basis and embraces the following features:

1. SUPERVISION OF INVESTMENTS:

On subscribing, each client files with us a confidential list of his security holdings. We then make a careful analysis of this list and furnish him with a full expert report on same. This is not a superficial nor mere "sketchy" report, but it embraces definite opinions as to the intrinsic merit of each issue. Further, if his list is poorly constructed; if he has too many eggs in one basket, or too large a proportion of his holdings are bad or contain elements of weakness, we suggest definite changes and improvements. We suggest ways of strengthening the principle as a whole and of increasing his average income. If the client has additional capital to invest, we make suggestions in the light of what his holdings already are. While we are great believers in "diversifying" investments, at the same time we recognize the dangers of spreading a list "too thin" as well as the folly of concentrating on too few issues or too few types of enterprises.

2. CORRESPONDENCE AND CONSULTATION:

All clients have the right to ask for special reports or opinions regarding any particular security

or other financial subject at any time. This may be done either by correspondence or personal call. This feature is actively used by a very large number of our subscribers, and is vitally important, as scarcely a week passes without questions of importance coming up in connection with one's investment interests. New security issues are constantly being offered; suggested changes are constantly being made by dealers, and many events occur which make it necessary for holders of securities to make intelligent and prompt decisions regarding their investment capital. The many personal calls and the heavy mail we receive all through the year show how widely this feature of the Service is used. We receive callers for consultation purposes daily, except Saturdays, from 9.30 a. m. to 5. p. m.

3. NEWS BULLETIN SERVICE: A continuous news bulletin service is supplied to each client who files with us a list of his holdings. The confidential lists so received are cross-indexed and all news or other developments relating to anything on the list are promptly sent to the subscriber. The news bulletins are supplied on special sheets to be filed alphabetically by the subscriber in the special index binder which is furnished. He is thus kept in close touch with every event affecting his interests, and avoids the necessity of scanning the financial papers from day to day. And when any vital matter occurs requiring a decision, we immediately forward a special bulletin of advice.

4. WEEKLY REVIEW OF FINANCIAL CONDITIONS: This is a comprehensive printed letter, specially prepared each week by Mr. Moody, in which the financial and investment situation is interpreted and discussed. From the investors' standpoint, this Review is of vital importance, for here the ebb and flow of prosperity and depression are discussed and their influence indicated on the future course of prices and investment values. This Review has for years been employed as an accurate guide by bankers, financial institutions and investors in all parts of the country. The comments include discussions on all fundamental influences, such as the war situation, politics, crops, trade conditions, etc., as well as specific subjects of many kinds. A concise view of the immediate outlook in the stock and bond markets is always to be found in these weekly issues.

5. SPECIAL WEEKLY ANALYSES: These are complete printed exhibits or analyses covering particular properties or subjects of vital interest. They have great permanent as well as current value and should always be filed for future reference. Frequently these special studies and analyses distinctly foreshadow future developments in the properties discussed. During the past two years, many of our clients have been vastly benefitted by acting on the facts divulged in these letters. Among the vast rises in values which have been forecast unerringly by us through these special studies since

the opening of the European war are the following: Bethlehem Steel; American Beet Sugar; Central Leather; United States Steel; Westinghouse; Baldwin Locomotive; General Motors; Willys-Overland; Lackawanna Steel stock and bonds; Standard Milling; Western Union; Montana Power; American Brake Shoe; General Chemical; Inspiration, Kennecott, Utah and Anaconda coppers; the Standard Oil and other oil stocks, such as Texas Oil and Mexican Petroleum; the marine issues, such as United Fruit, Atlantic, Gulf and West Indies, etc. Recently we have brought prominently to the front the unusual position of Republic Iron & Steel, Railway Steel Spring, American Hide & Leather, etc., all of which have subsequently undergone large advances in value. In the steam railroad field we were the first, in 1915, to point out the attractiveness of Norfolk & Western below 110, Baltimore & Ohio at 72; New York Central at 82, and Union Pacific at 125. Dozens of other cases of this nature could be cited.

6. **MOODY'S ANALYSES OF INVESTMENTS:** An annual publication of investment information, issued each year in two volumes, one volume covering the Steam Railroad field and the other Public Utilities and Industrials. These books are not only "manuals" of mammoth scope, and furnish full descriptions of all the corporations, with the latest facts and figures, but also contain careful, expert analyses of the different companies,

showing latest and average earning power over a series of years, financial condition, margin of safety of all the security issues and general credit and record of each company. All the Bonds and Stocks are described, classified and RATED, in accordance with their position and security. Thus, the highest grade investments are given the rating of "Aaa," the next grade "Aa," then "A," "Baa," "Ba," "B," "Caa," "Ca," etc., until the very poorest securities are reached. The subscriber is thus able to ascertain at a glance the exact position and strength of the security which he holds or contemplates purchasing. No investor who has these books need take the "opinion," offhand, of anyone; the actual facts are before him.

The books contain a vast amount of valuable matter not found in any other publications. The percentages earned on stocks are shown throughout and comparative income accounts are furnished in full detail for a series of years. These annuals are sold separately at \$15 per volume, but for the user to get the best results he should have the entire Service, which is co-ordinate with the annuals; and conversely, the best results from the other parts of the Service can only be secured by having the books also.

7. BOND LETTERS AND ANALYSES OF NEW INVESTMENTS: The reviews and forecasts of the bond market, which we have frequently issued, are notable for their careful study of

fundamental investment influences. We foreshadowed a distinct revival in the American bond market early in 1915 and emphasized the vast absorption of bond issues which would occur during the war as a result of low interest rates, rapid accumulation of investment capital in the United States, etc. Specifically, we have emphasized the advantages of purchasing relatively short term issues, municipals, good foreign government loans, etc. Periodically we have issued letters setting forth the strong or weak points of various types of bonds and preferred stocks in the several fields of investment. Our regular issues analyzing the many new investments which have appeared from time to time directly supplement the annual volumes and keep the user up to date throughout the year.

8. MONTHLY BUSINESS BAROMETER:

This barometer shows in statistical form the changes in trade and industry from month to month. It is of unusual value in enabling investors and bankers to anticipate the coming tendencies in finance, trade and industry, on which all security values are based. There is a time to invest as well as not to invest. All things move more or less in cycles, and to understand these cycles involves a continuous study and analysis of fundamental business conditions. Careful study of conditions has always been an important feature of this Service; all clients have derived important benefits where

they have made use of this Barometer with intelligence and care.

9. MONTHLY QUOTATION RECORD: This record furnishes the latest quotations of all bonds and stocks, alphabetically arranged, in all fields of industry, whether listed or unlisted, and also shows the yield on latest prices, etc. It enables the subscriber to keep closely in touch with the market prices of his investment holdings. The record is preserved and filed in the binder which we furnish.

10. MONTHLY REPORTS OF EARNINGS: These issues contain the latest reports of earnings, both gross and net, of the properties described and analyzed in the annual volumes. They cover all steam railroads and all industrial and public utility companies that make monthly or quarterly reports. Thus they directly supplement the annuals and enable the subscriber to keep closely up to date.

11. "HOW TO INVEST MONEY WISELY" AND "HOW TO ANALYZE RAILROAD REPORTS:" These two textbooks, written by Mr. Moody, are standards of their class, and should be in the hands of every holder of stocks or bonds. They are bound in flexible leather and can be readily carried in the pocket. They sell separately for \$2.00 per copy, but are furnished free to the subscribers to the full Service.

12. **GENERAL ANALYSES:** Finally, constant study is made in frequent special letters of such fundamental factors as the trend of interest rates, the crop situation, political influences, the progress of the war, etc., all from the standpoint of the security holder. These special letters have frequently been notable for their accuracy in judging the trend and influence of world wide events.

TERMS: *The Service is furnished for a fee of \$100 per annum, payable in advance. Immediately on receipt of a subscription, the Service starts, and we send the two latest issues of "MOODY'S ANALYSES," the textbooks, the current letters and analyses, with blank forms for filing confidential lists of specific securities and subjects on which special information and advice are desired. We furnish, free, flexible binders and an index for filing the letters, bulletins and current analyses as they appear.*

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"The book is original and unique and supplies a want not heretofore covered by financial publications."

Commercial & Financial Chronicle, New York.

This book is of practical value not merely to one class in the investment field, but to all. It is not simply a Bond Broker's or Stock Broker's text book, but embraces features of unusual usefulness to Railroad Officials, Investors, Financial Institutions and many others. It is the one absolutely indispensable book for the Investment Banker; the Bond Dealer; the Stock Broker; Banks and Trust Companies; Savings Banks; Insurance Companies; the Individual Investor; the Bond Salesman; Railroad Officials.

**Physical
Factors**

In the Railroad Edition the physical characteristics are first dealt with. These embrace a description of the location and Territory, a table showing the diversity of the Freight Tonnage for ten years, and a further table, containing a complete TEN-YEAR RECORD of Mileage, Equipment, Passenger and Freight Density, Average Revenue Train Load, Train-mile Earnings, and Passenger and Freight Rates. These items are then averaged for the ten-year period, and a COMPARISON made with like averages of four other systems operating in similar territory. Comments are made by the writer on the exhibits shown in each case, thus furnishing a proper and simple interpretation of the figures for the use of BANKERS, BROKERS and INVESTORS generally.

The foregoing method is applied to every railroad system analyzed, and forms a complete ten-year detailed view of the changes in the property in a physical and operating sense.

**Income
Factors**

A Ten-year record is presented of the INCOME ACCOUNT of each road reduced to a mileage basis.

This table covers the Gross Revenue, Maintenance Expenditures, Transportation and Traffic Expenses, Net Operating Earnings, Total Net Income, Fixed Charges, Margin of Safety over charges, Surplus Available for Dividends, amounts paid in Dividends, amounts spent in Improvements, etc. These items covering the ten-year periods are then averaged. The entire exhibit is commented on by the writer, its strong and weak points being brought out clearly in each case.

This analysis of income accounts forms a complete ten-year view of the changes of each property in its earning and dividend-paying power. It gives just the information which the STOCKHOLDER or the BONDHOLDER needs, but usually finds so difficult to obtain,

**Capital
Factors**

A Ten-year record is next presented of the BALANCE SHEETS of each railroad system, reduced to a mileage basis. This exhibit shows the Stocks

and Bonds Outstanding, the amount of Rental Obligations (capitalized at 5%), amounts of Securities or Investments owned, the Net Capitalization of each road, and the Percentage of Net Income on Net Capital. A Dividend Record is also presented in this Table, and all figures cover the full period of ten years. Averages of the Ten-year figures are shown, and comparisons made with four other properties, as in the case of the other tables. Finally, analytical comments are made by the author on the entire exhibit, pointing out the strong or weak features on the financial side of the property.

Bond

Ratings

A complete record of every railroad bond issue of each system is furnished, the different issues being listed according to their priority and general security. A Rating, based on the relative strength of each issue is then given. These ratings are presented on a plan similar to that employed by mercantile agencies in rating the credit of merchants. Thus, a very high-grade bond, such as Lake Shore 3½s, is rated *Aaa*; one of lower grade, like Baltimore & Ohio Southwestern 3½s, is rated *Aa*; Erie consol. 4s. are rated *A*; Missouri Pacific refunding 5s, *Ba*; while much lower grade issues, such as Erie convertibles, get a rating of *B*, and much more speculative bonds, with doubtful futures, are rated, *Ca*, *C*, *D*, etc. Information is given in each case for demonstrating how the rating is ar-

rived at; the nature of the lien is shown, amounts outstanding per mile are given *and it is stated in each case in what State, if any, the issue is legal for savings banks.*

This method of listing and rating is applied to every railroad bond issue, over 2,000 bond issues being rated in the book.

Stock Ratings A complete record of every stock issue of each system is also furnished, including all the guaranteed stocks. The different issues are listed according to their priority in claim on income, interest in equity, etc. A rating similar to that applied to the bond issues, is given each stock. Thus, all good guaranteed stocks are rated *Aaa* or *Aa*, preferred issues with a strong record are also rated high, some common stocks get the highest rating, while the position of the more speculative issues is shown by ratings running down from A to D or E. Defaulted bond issues, and stocks awaiting the results of reorganization, are of course in most cases rated very low. As in the bond record, information is given in connection with each stock, showing the terms of the lease, if any, or the basis of its position in earnings or equity.

A Ten Year Price Range In the back of the volume a ten-year record of prices of stocks and bonds is presented, showing the highest and lowest quotations of each issue in every year of the decade. No com-

plete record of this nature has ever before been presented, and its extraordinary value to Bankers, Brokers and Investors need not be emphasized here.

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Industrial
Edition**

The volume covering Public Utility and Industrial Securities is of the same broad scope and character as that covering Steam Railroads.

While there are some reference books in existence which undertake to describe corporations in these fields, there are none aside from "Moody's Analyses of Investments" which undertake to *analyze* and *rate* the various security issues. Our book, however, in addition to furnishing full statistical records of these companies with the greatest possible completeness, analyzes the operating results, classifies the stocks and bonds, and gives each security a *Rating*, just as is done in the volume on Steam Railroads.

Each part is sold separately, at \$15.00 each, or combination orders are accepted for the full year's subscription to the two parts for \$25, payable on delivery. Part I, covering the Steam Railroads, is issued in January of each year, and Part II, covering Public Utilities and Industrials, in June of each year.

Published by the
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35 Nassau Street, New York City.
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HOW TO ANALYZE RAILROAD REPORTS

By JOHN MOODY

This attractive book, which has recently been issued, covers in a complete and popular way, the entire subject of railroad operation and finance. It is intended primarily for the Investor who holds railroad stocks or bonds, and supplies a long felt want for everyone who is in any way interested in railroad securities.

Every stockholder receives his annual report from the railroad in which he has invested his money, but very few stockholders have the time or the technical knowledge to clearly analyze the meaning of the figures presented. This little book explains the principles whereby every statement and figure in the report can be clearly understood, and the significance properly judged.

The following table of contents indicates the character of the book, and the scope of the subject.

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The scope of the book is briefly indicated by the following summary of chapter headings:

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